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AMERICAN WOODTURNER

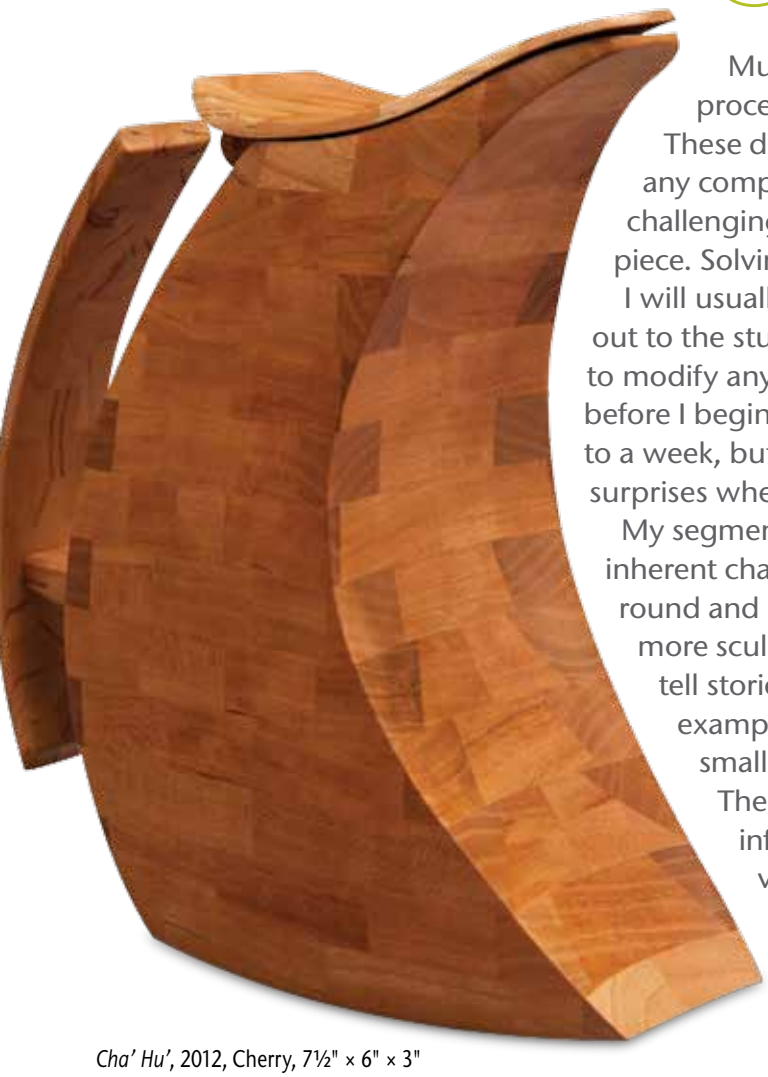
Journal of the American Association of Woodturners

JOHN JORDAN
HONORARY LIFETIME MEMBER

RICHARD RAFFAN
POP MERIT AWARD

MUSIC STAND

Curt Theobald



Cha' Hu', 2012, Cherry, 7½" × 6" × 3" (10 cm × 15 cm × 7.6 cm)

Much of my work reflects my life experiences. My creative process begins with putting my ideas into drawings. These drawings help me define my work and anticipate any complexities during construction. The more technically challenging the project, the more passionate I become about the piece. Solving the challenge is where my passion lies.

I will usually go through several design changes before I head out to the studio to construct a prototype. This process allows me to modify any aspects of the piece and work out design challenges before I begin actual construction. Making the prototype can take up to a week, but the investment of time is worth it—I don't want any surprises when working with valuable species of wood.

My segmented designs became more contemporary for the inherent challenge of creating new work that went beyond round and predictable. I wanted to bring to life ideas I had for more sculptural pieces that had a personal connection, and to tell stories related to my life experiences. In *My Mothers*, for example, the large brown piece represents my wife. The smaller gray one represents our daughter's birth mother. The smallest piece is our daughter and has both mothers' influences represented by the mix of colors from the larger vessels.

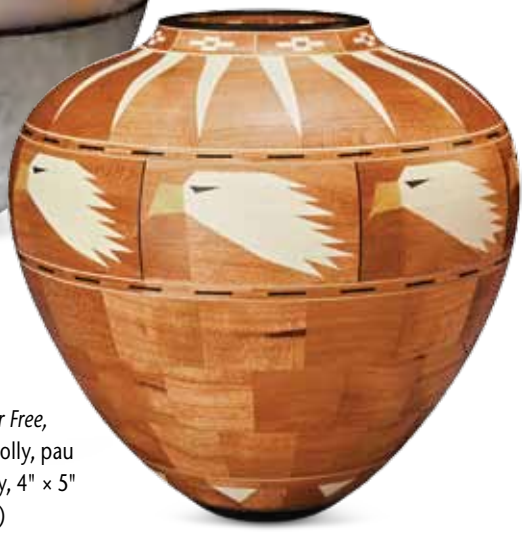
More of Curt's work can be seen at curttheobald.com. Curt will be a featured demonstrator at the San José symposium.

Emerald Isle, 2010, Emerald soapstone, dark green soapstone, ebony, 4½" × 8" (11 cm × 20 cm)

Lightning Snake, 2003, European pear, holly, ebony, bloodwood, lacewood, Macassar ebony, 5" × 8" (13 cm × 20 cm)

Family Series, 2011, Wenge, glass, 6" × 3" × 2¼" (15 cm × 7.6 cm × 5.7 cm)

Diamonds, 2010, Italian alabaster, Utah alabaster, ebony, 5" × 5" (13 cm × 13 cm)



Freedom's Never Free, 2007, Cherry, holly, pau amarello, ebony, 4" × 5" (10 cm × 13 cm)

My Mothers, 2010, Dyed birch, holly, 6¼" × 3½" × 4½" (16 cm × 9 cm × 11 cm) (tallest)

Cool Blue Wave, 2011, Apricot, glass, 6" × 3" × 2¼" (15 cm × 7.6 cm × 6 cm)

Dedicated to providing education, information, and organization to those interested in woodturning

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Journal of the American Association of Woodturners

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Cover – John Jordan, Untitled, 2010, Walnut, 11" × 11" (28 cm × 28 cm)

Back Cover – Mark Gardner, *Make a Space for Me,* 2012, Cherry, mahogany, milk paint, 5½" × 6" × 6" (14 cm × 15 cm × 15 cm) Photo: Tib Shaw

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The AAW does not endorse any product featured or advertised in this journal.

A NOTE ABOUT SAFETY

An accident at the lathe can happen with blinding suddenness; respiratory and other problems can build over years.

Take appropriate precautions when you turn. Safety guidelines are published online at woodturner.org/resources/safety.htm. Following them will help you continue to enjoy woodturning.

From the Editor

Congratulations to John Jordan, Honorary Lifetime Member, and to Richard Raffan, winner of the Professional Outreach Program's Merit Award! Read more about these two highly deserving individuals in this issue.

In March, I attended the TurnFest symposium in Australia, my second trip to that event. This huge tenth anniversary celebration, with forty demonstrators from around the world presenting and 600 turners attending, lived up to its billing as a significant international event. Organizer David Drescher received a thank-you gift (an all-expenses paid trip to the AAW symposium in San José) from the demonstrators, and so for the first time David will visit the U.S. and attend the AAW's international symposium.

John Jordan and Richard Raffan have both contributed significant articles to the journal. Both are excellent demonstrators and ambassadors for woodturning, representing their respective countries. I look forward to congratulating them in person, saying hello again to David Drescher, and generally enjoying this year's international symposium.

Our network is far-reaching and connected internationally and instantly via the Internet. To maintain this connectedness, we are exploring the possibility of publishing an electronic interactive version of *AW*. The journal is currently available online, but it is not yet e-reader friendly; that will happen soon. Electronic versions of the journal will not, however, replace what you hold in your hands. In the meantime, this issue is printed on a better grade of paper and it contains eight more pages than before. Enjoy!

—Betty Scarpino

President's Letter

There are two important programs that will be part of this year's symposium in San José: the Youth Woodturning Program (YWP) and the first meeting of an AAW committee that deals with international participation and connections within our organization and around the world.

John Hill conceived of and started the Youth Woodturning Program in 2005. You will find an article on the history of this important program on pages 6–8. At its heart, AAW is an educational organization. Most of our programs are aimed at adults, but we recognize the importance of reaching out to youth.

If you attend the symposium, stop by the youth turning room to watch the excitement. While in the tradeshow area, take time to thank the generous vendors who help make the YWP successful: Walter-Meier Powermatic/JET, Crown Tools, Woodcraft, Vince's WoodNWonders, The Sanding Glove, and Teknatool. Their continuing support is essential. More than 400 youth have had a chance to experience woodturning and 170 of them have gone home with a mini lathe and turning equipment.

The YWP would not be possible without the year-round efforts of many volunteers. Their names are mentioned in the article, and I personally thank them for the vast time and energy they have devoted over the years. Perhaps the youth room can be an inspiration to your local chapter to help out at a school in your area. Let's get kids hooked on woodturning!

The international members within the AAW and our relationship with the wider turning world are of importance to the AAW. Approximately 9 percent of our membership is from outside the U.S. The international influence on the AAW dates back to the organizing meeting at Arrowmont in 1985 where turners from Canada, England, Scotland, Ireland, and Northern Ireland were present. At our symposiums we have had international demonstrators and presenters from at least fourteen countries. *American Woodturner* has had articles on woodturning in thirteen countries.

This international presence exposes our members to ideas and methods of woodturning that may not be familiar to U.S. members, and helps those abroad learn from us. This cross-pollination of ideas makes our woodturning skills stronger. This year, the local chapters in Portland (where I live) will host Soren Berger from New Zealand, Stuart Mortimer from England, and Eli Avisera from Israel, among others.

Terry Martin has stepped forward to lead the discussion on how the AAW can assist, facilitate, and benefit from the exchange of woodturning ideas and woodturners around the world. Our Articles of Incorporation, dating back to 1986, state in Article II (A): "The activities and purposes are . . . to promote the craft and art of woodturning both nationally and internationally." There will be an organizational meeting for the new committee and a panel discussion at San José to talk about the future of woodturning throughout the world. Consider sitting in on the panel discussion.

The AAW is an international organization, *and* we are a close community of members who share a love of woodturning.

See you in San José,

Dale Larson

Dale Larson

AAW Annual Financial Statement for 2011

Revenues and Expenses

Income

Annual Dues	$663,725
Grants & Contributions	289,824
Publications & Products	313,366
Symposium	527,306
Exhibitions Investment	6,200
Other Income	1,306
Total Income	**$1,801,727**

Expenses

Publications & Products	$604,405
Symposium	565,089
Gallery & Exhibitions	54,368
Scholarship Grants	105,111
Professional Outreach	51,746
Other Programs	4,828
Administrative	428,118
Fundraising & Member Development	78,165
Total Expenses	**$1,891,830**
Net Income	**$(90,103)**
Restricted Portion	(59,875)
Unrestricted Net Income	**$(30,228)**

Balance Sheet

(as of 12/31/11)

Assets

Checking & Savings	$445,305
Accounts Receivable	48,129
Inventory	67,767
Prepaid Expenses	83,103
Equip & Furniture-Net	25,018
Memorial Endowment	126,283
Osolnik Endowment	51,889
Permanent Collection	207,115
Total Assets	**$1,054,609**

Liabilities

Accounts Payable	$40,900
Accrued Expenses	19,642
Deferred Revenue	555,385
Total Liabilities	**$615,927**

Net Assets

Unrestricted	$(78,156)
Temporarily Restricted	267,952
Permanently Restricted	248,886
Total Net Assets	**$438,682**
Total Liabilities & Net Assets	**$1,054,609**

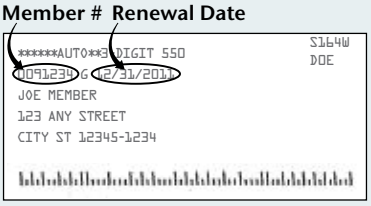
Important Renewal Notice

In the past, all memberships were due for renewal at the end of December. As of March 2011, all membership cycles were converted from a calendar basis to anniversary basis. Your current membership became effective as of your join date and will remain active for one year.

Your renewal date is located on your journal's mailing label. If you have questions about your membership renewal please call the AAW office at 651-484-9094 or toll free 877-585-9094.

It's easy!

1. Carefully check the renewal date and member information indicated on *your* mailing label.



Save the trees for turning and renew online!

2. Log on to the members' area at **woodturner.org** to renew.
3. If you have questions, email inquiries@woodturner.org or call 651-484-9094 or 877-595-9094 (toll free).

American Association of Woodturners, 222 Landmark Center, 75 5th St W, St. Paul, MN 55102-1724

AAW Membership Dues

The new AAW membership rates went into effect in April 2012. Since our last rate increase three years ago, we've faced the reality of higher costs for insurance, printing, postage, and other expenses. Beyond the things we cannot control, we are also making investments in technologies and programs so we can continue to deliver the caliber of quality and service expected by our growing membership. We have introduced more content into *American Woodturner* and the number of annual issues has grown from four to six. The AAW website is undergoing a vast redesign to improve our communications and introduce substantially greater digital content. And members present at the symposium this year and in future years, will have the experience of viewing demonstrations through state of the art audiovisual equipment. These are just a few examples.

We acknowledge that increasing rates requires careful consideration. We give our full commitment to control costs and use every opportunity to make our operations run as efficiently as possible. We gratefully acknowledge your continued support of the AAW and look forward to serving you for many years to come. ■

—Dale Larson, President, AAW Board of Directors

Symposium Youth Turning Program

This will be the eighth year for the Youth Woodturning Program (YWP) held at the annual AAW symposiums. The program started in 2005 in Overland Park, Kansas, with sixty-two participants and has been going strong ever since. In the seven years since its inception, four hundred youth have participated and 170 have won a JET mini lathe, stand, chuck, safety gear, and woodturning tools.

For those not familiar with the program, youth ages 10 to 18 can attend the symposium at no charge when attending with a paid adult sponsor. Several generous tool and equipment companies donate the equipment and supplies needed to conduct up to ten classes, held over the three days of the symposium. The classroom consists of twenty-five workstations where young woodturners work on a specific project, all at the same time. The classes are led by an experienced woodturner and assisted by volunteers. At the end of the symposium the lathe packages are given to twenty-five lucky participants through a drawing. The winners are responsible for shipping the equipment.

The YWP got its start through the leadership and work of former AAW Board member, John Hill. In John's words, "For many years, the sentiment expressed by AAW members and chapter leaders was 'we are just a bunch of retired people for the most part. Where will our future turners come from? How can we get kids involved?'" John tells the story:

While on the AAW Board, I had convinced several lathe manufacturers to offer deep-discount pricing on lathes sold to chapters that would use them for demonstrations or teaching. In a conversation with John Otto, former marketing manager of Walter Meier Powermatic/JET, I mentioned that our members would love to get kids involved in turning. John said he would be interested if we could put together a program. We needed about twenty lathe stations and there was nothing in the AAW budget to purchase the equipment. Storage from year to year and shipping presented a problem, so I asked for a *really deep* discount. When we next spoke, John said that Walter Meier Powermatic/JET would donate the lathes.

I was super excited! Armed with this proposal, I contacted Anthea McQuoid, Teknatool International, and asked for Nova midi chucks. They said sure. I called Brian Gandy of Crown Tools and he offered twenty tool sets. Woodcraft Supplies agreed to furnish twenty faceshields. I was like the little dog that chased the garbage truck—once he catches it, what does he do next?

We needed a well-known turner to teach the classes and it was obvious that Bonnie Klein was the perfect candidate; she has long been teaching kids on her Klein-design lathes. I told her about the concept of a youth room, and asked if she "knew anyone" who could teach kids on small lathes. She burst out laughing and said that was the subtlest question she had ever heard. Of course she would do it. She suggested Nick Cook to co-teach. I called Nick and he was excited to be onboard.

I presented my proposal to the AAW Board, that all youth, ages 10 through 18, be admitted free to the symposium if a registered adult accompanied them. After a discussion, the Board voted unanimously to proceed.

The Northland Woodturners helped at that first symposium, as teacher assistants in the youth classes and to receive and set up the lathes. They did a great job and loved it. For the first couple of years, Bonnie sharpened the tools.

Bonnie recognized the need to be thoroughly organized so that each youth participant would have an equal chance to be in the class of his or her choice. She had all registrations sent to her to organize the classes.

All of the vendors who donated equipment were pleased with the program, signed up for the next year, and have been participating ever since, most recently with twenty-five lathe stations. In 2007, Paulo Marin of CET, Inc., gave a complete tool roll containing six tools to each youth registered, not just to the winners of the lathes.

In addition, many chapters have instituted youth programs. Now we know where the future turners will come from. Thanks to all!

Significant contributors

Hundreds of volunteers have participated in the success of this program, but some have contributed significantly: Bonnie Klein has been an instructor every year. Al Hockenbery developed the rotation schedule and coordinated the equipment acquisition for several years; Almeta Robertson has been the tireless room coordinator from the early days; Jane Charbonneau handles the symposium registrations and waiver forms; Joe Ruminski has been an instructor and general all-around supporter for several years; Dale Larson took over the AAW Board liaison for the YWP in 2009. And, after teaching two years, I have been coordinating the class assignments, drawings, and vendor follow-up for the past three years. Others who regularly instruct include: Nick Cook, Al and Sherry Hockenbery, Avelino Samuel, Andrew Glazebrook, and Barry Gross.

The local chapters at each symposium venue also contribute significantly. They receive the lathes, transport them to the symposium location and assemble them, configure the youth room, sharpen the tools, acquire wood, and then on Sunday break down all the lathes and repackage them. They also provide volunteers to assist in each class. Their help is invaluable for a smooth-running program.

Woodturnings by Sam Olson, a 2011 lathe winner, who says, "I am completely hooked on woodturning."

Participants and volunteers at the 2009 Albuquerque symposium.

About the program

- Of the 400 youth participants since 2005, 40 have participated in two separate symposiums; 8 in three symposiums; 3 have attended four symposiums; and Kailee Bosch and Troy Jambers have participated in five symposiums.
- We have averaged 68 participants each year with a high of 99 at the 2006 Louisville symposium.
- Of the total, 273 participants were boys and 127 were girls.
- Number of lathes given away: 172.
- Seven winners have turned down the lathe either because their family already had one or they felt someone else could use it more.
- At the 2009 symposium, Manon Deletraz from France won a lathe, but shipping costs would have been prohibitive (and the lathe was wired for use in the U.S.). Barry Schwaiger, marketing director of Walter Meier Powermatic/JET, arranged for a mini lathe and stand to be shipped to Manon's home in France from the European distributor. They donated the other lathe to the local club in Albuquerque.

Results of the program

Last year, one of the Walter Meier Powermatic/JET representatives was thinking out loud, wondering how many of the 170 youth who won lathe packages were still turning. I had recently researched the names of all the participants and lathe winners, so I had solid information to find an answer. Working with Linda Ferber, we developed a survey and emailed it to all 170 winners. We were not able to reach all of them, but we connected with about 75 percent and had a response rate of about 20 percent. The results were interesting:

- All of the respondents reported they still had the lathe they won and 88 percent said they still actively turned. The majority turn wood at their own home but several say they also turn at school, their local woodturning chapter, or at a friend/mentor's shop. Seventy-five percent have a mentor and most of the mentors are the father, but include a few grandfathers or mothers.
- Pens are the favorite item to turn. Other answers showed a growing sophistication in woodturning: egg, kaleidoscope, ornaments, bowls, plates, chess set, magic wands, boxes, ring holders, travel mugs, and my favorite, damage-control plugs for ship repair work.
- When asked if winning a lathe provided a positive impact, 100 percent responded affirmatively. When asked how the YWP affected their interest in woodturning, the answers were positive. For example, "I would not have continued without a lathe at home." "I wasn't afraid to do it anymore." "I could be creative on my own lathe." "It really started woodturning, as I wasn't doing it before." "It's cool to have my own lathe." "Really fun to participate, also to meet the pros."
- Thirty-three percent of the respondents are members of the AAW, and about 20 percent are members of a local club. Of the local club members, almost all are actively ▸

Jonah Vesery, a 2006 lathe winner, says, "I mostly use my dad's equipment, but I teach younger kids on my mini lathe from time to time."

Joe Ruminski teaches the youth class at the 2008 Richmond symposium.

involved. Our final question was to ask if they would be willing to participate as a room aid in the YWP at an upcoming symposium. Six responded yes, and we will be following up with them.

It is clear that the Youth Woodturning Program is a resounding success. The youth are enthusiastic and have been positively welcomed by adults attending the symposium. Thank you to all of the volunteers and to the tool and equipment vendors who generously donate equipment and supplies to make this program possible. ■

Larry Miller is president of the Woodturners of Olympia, Washington. He has sponsored several youth for membership in the AAW and has been actively involved in the Youth Woodturning Program for five years. In addition, he teaches adults and youth in his well-equipped shop.

Local Chapter Benefits

The AAW is committed to supporting our many local chapters (more than 350). What are the benefits of being a local AAW chapter?

- Insurance coverage for club-sponsored woodturning activities for AAW/local chapter members
- Free email notifications of your regional symposiums sent to AAW members in your area
- Eligibility to apply for Educational Opportunity Grants each year
- AAW/local chapter banner and 5 free AAW DVDs (new chapters)
- Local chapter profile listed on the AAW website
- Participation in "Chapter Best Practices," available on AAW's website
- Local chapter website linked with the AAW website
- Chapter Challenge Competition at the national symposium
- AAW-sponsored chapter meeting at the national symposium
- Access to credit card processing through the AAW

Want to know more or have a suggestion on how the AAW can better serve local chapters? Call toll free at 877-595-9094 or email Linda Ferber at linda@woodturner.org.

Educational Opportunity Grant Program Awards $64,000

The EOG committee is pleased to announce the 54 winners of Educational Opportunity Grants (EOG) for 2012. This year's awards totaled more than $64,000. The committee reviewed 180 requests from AAW local chapters, individuals, and other organizations that offer woodturning programs and opportunities. Winners' names can be seen at woodturner.org/resources/eog/ where you can also learn more about the program.

The money for the EOG program is raised primarily from the EOG auction held each year at the symposium banquet; no membership dues are used.

I extend a sincere thank you to the committee for their work. Committee members are Binh Pho, Cassandra Speier, and Jean LeGwin.

Good luck to the recipients! ■

—Kurt Hertzog, Chair, EOG Committee

New Local AAW Chapters

Last year 16 new local chapters were formed. Congratulations to all of you who now have local-chapter support nearby! For information on local chapters, including how to start one, go to woodturner.org/community/chapters/.

Ames Area Woodturners, Iowa
Arkansas River Valley Chapter, Arkansas
Bay Lake Woodturners, Wisconsin
Bytown Woodturners, Ottawa, Ontario
Chapel Hill Woodturners, North Carolina
Diamond State Turners, Arkansas
Eastern Maine Woodturners
Endless Mountain Turners, Pennsylvania
Havelock District Wood Turners, Norwood, Ontario
Kenai Peninsula Woodturners, Alaska
Rainy River Area Woodturners, International Falls, Minnesota
South Saskatchewan Woodturners Guild, Canada
Stormont, Dundas & Glengarry Woodworkers, Ontario
Upper Valley Woodturners, Vermont
Western Massachusetts Woodturners
Woodturners Association of Manitoba, Inc., Canada

New Star Chapters 2011

We are pleased to recognize three new Star Chapters. To be a Star Chapter, all of the members must also be members of the AAW. Each Star Chapter receives a five-DVD set of *Masters of Woodturning*, a plaque recognizing Star status, a listing on woodturner.org/community/chapters, and an enthusiastic thank you from the AAW.

Bytown Woodturners of Ottawa, Ontario
Peace River Woodturners, Florida
Woodturners Guild of North Carolina

Fleur Bresler Receives One-of-a-Kind Award

At their March Spring Craft Weekend, the James Renwick Alliance presented Fleur Bresler with the prestigious One-of-a-Kind Award. The James Renwick Alliance (jra.org) is an independent national nonprofit organization dedicated to advancing scholarship and education on contemporary American craft, to supporting activities directed toward this purpose, and to encouraging connoisseurship and collecting. The Alliance assists the Smithsonian American Art Museum's Renwick Gallery in adding to its permanent collection of American craft of artistic significance and superior workmanship, supports scholarly research in contemporary American craft, sponsors public educational activities, and pursues other activities in support of the studio craft movement.

Fleur's patronage has had a significant impact on the woodturning community through the acquisition of hundreds of turned objects over the past twenty-five years. Fleur knows the artists individually and has collected the work of many in depth. Her vast penthouse apartment contains beautiful display spaces and she generously provides opportunities for individuals and groups to view the collection.

A longtime docent at the Renwick Gallery, her friendship with former curator Ken Trapp led to the donation of pieces from her collection to expand and fill voids in the museum. Last year, the Renwick Gallery showcased the exhibit, "A Revolution in Wood: The Bresler Collection," which is documented in a major book/exhibit catalog.

Fleur served five years as president of the board of the Center for Art in Wood (formerly the Wood Turning Center). She and her late husband Charles contributed financially many times, most recently in support of the Center's move to its new location. Her support of the Center's International Turning Exchange program has been instrumental in its success.

Fleur has attended many AAW symposiums, combing the Instant Gallery to acquire the work of new and established turners and to meet them personally. She is a petite woman, but her contributions are mighty. The American Association of Woodturners is thrilled to see Fleur recognized and we sincerely congratulate and thank her.

—Dale Larson, AAW Board President

Changes to AAW Bylaws

At its April 10 teleconference meeting, the Board made two changes in the association's bylaws:

Old wording: Section 5.13 Committees (f) Standing Committees, *Conference*

New wording: Section 5.13 Committees (f) Standing Committees, ***Symposium Planning***

The change was made to reflect the committee's name change.

Old wording: Section 5.18 Board Elections: *Ballots will be mailed out with the membership renewal packet in the beginning of August with a return deadline postmarked no later than October 21.*

New wording: Section 5.18 Board Elections: ***Ballots will be mailed out in the beginning of August. Ballots must be received by the office no later than the third Friday in October.***

The change was made to provide a fixed date that ballots must be received by the office. Under the old system, there was no definite cutoff date. Additionally, stipulating when membership renewals are sent out should not be part of the election process.

—Dale Larson, AAW Board President

Chapter Library

Bill Stephenson's article, "Rethinking the Chapter Library" (*AW* vol 20, no 1), inspired me to work on my chapter's library. The Eastern Maine Woodturners (EMWT) is a new AAW chapter that holds its meetings at the Eastern Maine Community College (EMCC) in Bangor. One of the mandates of our chapter is to integrate us as craftspeople and artisans into the fabric of this college.

We are doing this in a variety of ways by: accepting the faculty, staff, and students as members with their annual dues waived; providing mentors to those in need of learning the craft of woodturning; donating to the Skills USA auctions held twice a year; and maintaining a small library of written materials, books, and DVDs for chapter members to use.

When the subject of library usage came up for discussion in a meeting, it became clear that having a place for our library on campus and having someone manage this asset would be a step toward EMWT becoming part of the campus life. We expanded on this by asking, "Why are we limiting use of the library to just our chapter members when we're trying to get the entire campus to know about us?"

In reading the Best Practices section on the AAW website, a possible solution of involving the school library presented itself. I met with Janet Blood, the Associate Dean of Library Services at EMCC, and she was open to the idea, but had several questions because the school library was for the direct support of the courses at the school.

In her follow-up email to our chapter and her staff, she agreed to allow, *the Eastern Maine Woodturners to house some of their materials on the Faculty Reading Room bookshelf. Their materials may include DVDs. If they want to watch them at the library, they can use our viewing station. This group is comprised of students, faculty, staff, and community members. Their collection is on the honor checkout system. We will not be involved with checking out the materials. If a member decides to check out EMCC library materials, please set them up with a community card. In the future, EMWT thinks classes will be offered at the college involving this group. When that happens, we (EMCC) can put their items in our system.*

Our chapter will assign a volunteer to maintain the collection and add to it, and when the college offers classes in woodturning, our materials will become part of the general collection and be integrated into the library.

Dean Blood accepted the support of the chapter to make donations of woodturning books, magazines, and *AW* journal for the general library collection. We also received help from the AAW. They sent back issues of *AW*, which was encouragement to make this idea a reality.

Now club members can access woodturning materials any time the library is open and watch DVDs on site. We can get a community card for the entire library collection, and everyone has access to back copies of *AW*.

And, perhaps what we appreciate the most: Having the college host our library allows us to focus on what we enjoy the most—*turning wood*.

—Chuck Seguin, Secretary, Eastern Maine Woodturners

Oklahoma Woodturners Community Project

For many years, members of the Northeastern Oklahoma Woodturners Association, a local chapter of the AAW, have donated turned objects to the Community Food Bank of Eastern Oklahoma for their Empty Bowls Hunger Awareness and Fundraising Event. Last year we donated thirty bowls that raised $13,000.

Our ongoing partnership with this community project led Food Bank officials to ask if we would turn a minimum of 200 bowls to be given as *Remember Bowls* to the attendees at their fundraising event. We conducted a three-day Turnfest at our new facility in February where club members turned more than 400 bowls! We added 150 more from members who turned bowls at home.

At this year's event, as attendees deliberated over selecting the perfect bowl from the hundreds we donated, the line stretched for yards. The silent and live auctions generated $13,500 for the food bank, bringing our eight-year total to more than $61,000.

We encourage other clubs to support their local community. Doing so helps members gain skills and strengthen friendships inside and outside the woodturning community.

—Glen Key

Bruce Holden turns a bowl at Turnfest.

Bowls turned at Turnfest.

AAW Forum Contest Winners

The challenge for the last AAW Forum contest was pens, no other stipulation, except that the pen needed to be made between the opening and ending of the contest.

Thank you to Kurt Hertzog who juried the entries, and to everyone who entered the contest. Congratulations to the winners! To enter the next contest, view all the entries, and read the judge's comments, visit the Forum section of the AAW website at woodturner.org ■

—Kurt Bird, AAW Forums Moderator

First Place
Ed McDonnell, untitled, 2012, Polyester resin, acrylics, metals, 5½" (14 cm) long

Second Place
John Terefenko, untitled, 2012, Holly, Gabon ebony, CA glue finish, Roman Harvest Rollerball kit

Third Place
John Terefenko, untitled, 2012, Gabon ebony, aluminum rods, CA glue finish, Baron Rollerball kit

Prize Drawing for AAW Members

One of the many benefits of membership in the AAW is our monthly prize and year-end grand prize drawings. Thank you to the vendors who donated this year's prizes, which include tuition scholarships, $100 certificates, sanding supplies, DVDs, chucks, grinding jigs, and lathes!

When you patronize our vendors, please thank them for their support of the AAW. Visit our website at woodturner.org/org/mbrship/drawings_winners.htm to see each month's prizes and winners.

At the end of 2012, we will draw another name from our membership roster to give away a Powermatic 3520B lathe. That winner will name a local chapter to win either a JET 1642 or five JET mini-lathes. The Powermatic and JET lathes are donated by Walter Meier Powermatic/JET. Included is free shipping in the continental USA, or up to a $500 allowance for international winners.

2012 Donors
(Others may be added during the year.)

Anderson Ranch Arts Center, andersonranch.org
Arrowmont School of Arts and Crafts, arrowmont.org
Craft Supplies, woodturnerscatalog.com
David Ellsworth, ellsworthstudios.com
Easy Wood Tools, easywoodtools.com
Hunter Tool Systems, hunterwoodturningtool.com
John C. Campbell Folk School, folkschool.org
Mike Mahoney, bowlmakerinc.com
North Woods, LLC, nwfiguredwoods.com
Oneway Manufacturing, oneway.ca
Thompson Lathe Tools, thompsonlathetools.com
Totally Turning/Showcase Symposium, totallyturning.com
Trent Bosch, trentbosch.com
Walter Meier Inc. Powermatic/JET powermatic.com and jettools.com
Woodturning Design magazine, woodturningdesign.com

Call for Demonstrators
AAW Symposium 2013
Deadline: October 15, 2012

The AAW's 27th annual international symposium will be held in Tampa, Florida, June 28-30. Visit the AAW website at woodturner.org/sym/sym2013/ for instructions on how to submit your application. For more information or assistance, contact the AAW office at inquiries@woodturner.org or call 651-484-9094.

Book Review
Woodturning Design by Derek Hayes

There is a natural tendency for a woodturner of any skill level to want to improve his or her own turning abilities as well as develop a critical eye for design and an artistic synthesis of all the components that come together in turned wooden forms. *Woodturning Design* provides a useful introduction to the various individual elements that combine to produce the pleasing, interesting, and exciting qualities of a well-executed piece.

Author Derek Hayes begins with an overview of design elements common to all artwork (color, line, form, space, pattern), and then focuses his discussion on specific aspects of proportion, scale, and properties of curves. He continues with further elaboration on individual components of turned forms, including the rim and foot; makes various points regarding open and enclosed forms; and provides relevant visual examples to illustrate these points. He also introduces the reader to a range of materials and techniques that are available to woodturners to enhance their own creative products, on and off the lathe. If you are searching for a how-to book for the various embellishment techniques, however, you will not find any here. Such a reference is beyond the scope of a general book on design. The author's approach is one of exposition, explanation, and providing general information; the reader is introduced to the basic elements of turned-form design and generally informed of additional design possibilities, including embellishments such as texturing, coloring, gilding, and incorporation of nonwood materials.

The text is divided into three approximately equal-length sections: *Principles of Design* (containing four chapters: Design Elements, Sketching, Proportion, Pattern); *Practice* (four chapters: Open Forms, Enclosed Forms, The Foot, The Rim); and *Application* (three chapters: Using Wood, Using Decoration, Using Color). An annotated nineteen-page Gallery section contains fourteen images of turned forms, selected by the author as good examples of form and design. This Gallery provides inspiration beyond the many examples of turned forms seen throughout the text. It would not be an exaggeration to say that the book is extremely well illustrated—it is a challenge to find a page that does not contain an image or a drawn figure. Readers will appreciate the logical flow of concepts, and will benefit from the easily understood coordination of text and illustrations. There is also a short but useful bibliography.

Woodturning Design will be valuable to those turners who have mastered the basic techniques of woodturning and want to learn more about the design elements, embellishment techniques, and diverse media that can assist them in advancing their woodturning abilities in new creative directions. ■

—Rob Wallace, Iowa

Woodturning Design, Taunton Press. Newtown, Connecticut, 176 pp. (Also published as Derek Hayes, *Woodturning Design,* Guild of Master Craftsmen Publications, Ltd., England)

Woodturning Exhibition at Atlanta Airport

In the continuing expansion of the widely acclaimed Art Program at Hartsfield Jackson Atlanta International Airport, two new exhibition cases have been installed in the airport's atrium. The venue is located in a publicly accessible area, so viewing is available to the general public.

The opening exhibition is of contemporary woodturning curated by Martha Connell, whose Connell Gallery was a major showcase for artists in this medium from 1985 until 2003. The exhibit will be displayed through July 2012 and is located between the north and south terminals.

Artists whose works are included in the first case—"Three Pioneers of Contemporary American Woodturning"—are Ed Moulthrop, Rude Osolnik, and Bob Stocksdale.

The second case—"Woodturning as an Art Form"—includes pieces from artists David Ellsworth, Michelle Holzapfel, Robyn Horn, John Jordan, Ron Kent, Ray Key, Bruce Mitchell, Philip Moulthrop, Dale Nish, Stephen Paulsen, and Al Stirt. ■

Rude Osolnik,
untitled, 1988, Laminated plywood, 9½" × 10" (24 cm × 25 cm)

"Pioneers of Contemporary American Woodturning," Ed Moulthrop, Bob Stocksdale, Rude Osolnik.

Austin Bergstrom International Airport

Central Texas Woodturners Association Exhibit

Club members tour the exhibit, (*l to r*) H.O. Evans, Judy Williams, Curtis Turner, Marcia Tolly, Johnny Tolly, Steve Green, and Bob Duncan.

An example of one of the several attractive posters—this one shows an ash platter and cherry ball by Curtis Turner. In the display case (*top*) is a maple platter with crystal inlay by Steve Green and (*bottom*) a segmented vase by Johnny Tolly.

Central Texas Woodturners Association exhibited work of more than twenty turned objects from club members at the Austin Bergstrom International Airport, during February through April this year. This was a rare opportunity to exhibit in a highly visible location, and served as a local milestone of recognition for the craft of woodturning.

How it began

The Austin Bergstrom International Airport (ABIA) maintains ten museum-quality displays throughout the terminal area. Airport officials pride themselves on regularly showcasing local artists. I frequently fly out of the Austin airport, and often stop to admire the artwork, which ranges from live musical performances on the Ray Benson stage to paintings and sculpture. On one trip, it struck me that this location would be perfect for an exhibition of turned pieces from local woodturners.

I contacted the exhibit coordinator to discuss the possibilities, and the staff agreed to an onsite meeting. We toured the current displays, discussed what was involved in developing an exhibit, and agreed on a future exhibition date.

The plan takes off

We now had to identify the pieces we wanted to display, organize the exhibit, create a communications plan, and coordinate delivery. We announced the opportunity at the next club meeting, and set a submission due date of one month later. We asked club members to submit photos of two works for consideration. The only guideline was that the item must fit within the physical display parameters provided by ABIA.

The goal of our selection process was to choose items portraying a range of turning styles, from the largest number of club members possible. The club board reviewed and approved the submissions. The photos of the potential pieces were then sent to ABIA for final approval. After the airport exhibit team made its selections, we notified the club members and asked each person to provide a short biography and description of each piece. Artists were also required to sign a loan agreement, stating the value of each item.

The items approved for display included a segmented football by Johnny Tolly, vases by Craig Timmerman, and inlaid platters by Steven Green, as well as works from other turners. We set a final deadline for each of the turnings to be delivered to the club installation team.

We were told that the installation process would be under high security. Club volunteer Judy Williams and I arrived at the loading docks to meet with TSA agents and the ABIA exhibit coordinator. After my vehicle was searched and all artwork inspected, we were allowed to enter a secured area to begin setting up.

We spent several hours working with ABIA staff in a secured back office to lay out and arrange the pieces. Our mission was to develop a layout that blended a range of works within each of the ten cases in a visually pleasing manner.

When we were satisfied with our layout, we began the installation. We carefully carried a few items at a time through the airport concourses to the display cases. Along the way, we received many compliments from travelers.

To promote the exhibit throughout the airport property, ABIA produced eight different, large posters featuring action shots of turning and other artist-supplied photos. ABIA staff designed and produced all the signage and posters. The smaller signage in each display case included the artist information and a short description of the featured item. The club website was featured in each display case.

Several weeks after the displays were up, I arranged for a tour of the exhibit for club members so that we could admire the final result. For some, it was the only chance to view the display. The ABIA staff coordinated the security screening for the group, and we were able to take photos to use on the club website (ctwa.org).

The gallery-quality fixtures and lighting provided stunning results, and the care and professionalism of the ABIA staff made this process highly rewarding. Our exhibition helped put the art and craft of turning in front of the traveling public, and provided a welcome to Austin visitors and residents. ■

—Curtis Turner, President, Central Texas Woodturners, curtisturnerstudio.com

Tips

Sharpen carbide cutters

I figured out a way to sharpen Easy Finisher carbide cutters. I like using carbide cutters, but they are $18 and eventually need to be sharpened (or thrown out). Sharpening is easy. The cutters pictured are the Easy Rough Rider and Easy Finisher tools, but almost any round or square cutter should work in this simple jig.

Mount a small length of hardwood into a 4-jaw chuck and turn the end round. Next, find a wood screw that fits the hole in the carbide cutter *and* fills the recess area for the screw *and* is positioned below the surface on the cutter. I used a number 8 × 1" (25 mm) screw in this setup.

Insert a small drill bit into a Jacobs chuck in the tailstock and bore a small pilot hole in the center of the turning. The screw should screw in snugly but not split the wood. If the hole is not centered or the screw is not tight, the cutter could move around and be sharpened unevenly. Do not over-tighten the screw.

Tighten the carbide cutter up to the wood stock and turn away more excess if necessary. Spin the cutter to a moderate RPM. Use a flat diamond file and hold it against the proper angle of the carbide cutter. You may have to experiment a little, but the spinning cutter will get a razor-sharp edge with a little patience.

Share your turning ideas!

If we publish your tip, we'll pay you $35. Email your tips along with relevant photos or illustrations to editorscarpino@gmail.com.

—Betty Scarpino, Editor

I find that it is more important to dress the top surface if your cutter is flat on top. The diameter of the cutter will slowly decrease with repeated sharpening, but you will get a lot more use out of these cutters.

—Ken Rizza, Georgia

Editor's note

Hunter Tool strongly recommends the use of the correct Hunter Tool screw to fit the respective cutter. The cutter has a taper that matches the taper on the screw, which assures the cutter is securely fastened. By using the wrong screw, it is possible to create cracks in the carbide.

Lapping the flank of the cutter only takes off a small portion of its diameter, but that diameter is reduced. The Hunter cutter also has a taper on the OD that matches the taper on the pocket wall of the shaft. This works in synch with the cutter screw to ensure the cutter does not unwind with use.

Hunter Tools recommends that you take care of the cutters—every time you

complete a project with the tool, randomly rotate the cutter. Most cutters fail because of mishandling of the cutter. With proper maintenance and storage, the cutter will last a long time.

—Mike Hunter

Dust collection hose

I rely on dust collection at the lathe mainly when sanding bowls and other objects (not to collect larger shavings). My solution was to use 3½' (107 cm) of 2½"- (64 mm-) ID LocLine (modularhose.com/Loc-Line-25-ID-System/25-kits) connected directly to my shop's central dust collection system. LocLine can be positioned wherever you need it and it will stay put.

When sanding bowls, I find that the centrifugal force causes the dust to swirl around the bowl and if I position the LocLine on the side opposite where I am sanding, then it creates a steady flow directly into my dust collector. When sanding the inside of a bowl, I position the LocLine behind the lathe and near the lower half of the bowl. Works great for me!

—Brian McKearney, New Hampshire

Drill accurate holes

There are times that I need to attach one piece of wood to another, such as the cup of a goblet to a multiaxis stem. I turn a tenon on the bottom of the cup and drill a hole in the top of the stem. I used to use calipers to measure the diameter of the tenon and then drill the correct size hole in the stem, but this was never a reliable way to have a tight joint.

I solved this problem by taking a board and drilling a hole for each drill bit in the set of drill bits I own. I then noted the size of each hole, next to the hole. I can now turn a random-sized tenon and match it to the tightest hole in the board. I then use that size drill bit to drill the hole in the stem. I have perfect results every time.
—Barbara Dill, Virginia

Sand horizontally

To make sanding the interior of large bowls more ergonomically acceptable to me, I took a chuck from my small lathe that has a 1" (25 mm) 8 tpi-adapter and used it as a horizontal clamp by purchasing a common 1" 8-tpi bolt with washers. For just a few bucks I have a clamp that I can quickly attach and remove from the ways of my lathe.
—Lanny Dean, Maine

Tool storage

A couple of years ago I designed a tool rack that has proven to be handy and easy to use. When I was reading the last issue of *AW*, I had some thoughts about the tool storage systems shown in the Tips section:

Simple tool holder: Hanging the tools on the wall behind the lathe, or on a wall near the lathe is not as convenient as having the tools right next to you. The rack as shown would not hold tools tightly, and they could tip or possibly fall out.

Easel tool storage: The exposed points of the tools could be a safety hazard.

Sliding tool rack: The points are exposed and the tools are not convenient to use.

The advantages of my tool rack: None of the tool points are exposed. The rack is easy to move around the room for use and storage. The angle of the rack tilts the tools toward you, making it convenient to remove or replace a tool. The PVC tubes are inexpensive and they are open on the bottom, letting any chips fall through. The design allows for longer or shorter legs to customize the rack to your height.

The holes in the PVC tubes are used to attach the storage unit to the wood. I insert a screw through the front hole and tighten the screw through a hole in the other side of the PVC into the wood backing.
—Jeffrey A. Knichel, President, Hudson Valley Woodturners

Calendar of Events

August issue deadline: June 15

Send information to editorscarpino@gmail.com

Canada

July 27–29, Saskatoon Twenty-Twelve Woodturning Symposium, SIAST Kelsey Campus, Saskatoon, Saskatchewan. Featured demonstrators include Clay Foster, Mark Sfirri, Jimmy Clewes, Beth Ireland, Andrew Glazebrook, Lyonel Grant, and Michael Hosaluk, along with local demonstrators. For more information, visit hubcityturners.ca or call Saskatchewan Craft Council at 306-653-3616.

England

October 17–20, "Wizardry in Wood," presented by the Worshipful Company of Turners, Carpenters' Hall, London. For more information and to view the exhibit, visit wizardryinwood.com.

France

August 23–26, AFTAB congress, held during the tenth anniversary of the Bréville festival in the small village of Bréville, near Cognac. Invited are turners from all previous events. Formal demonstrations, activities by turners gathered in groups, exchanging ideas, and fun for all. The Bréville festival starts August 19, classes and hands-on activities from August 20 to 22. International demonstrators are Sharon Doughtie, Eli Avisera, Christian Burchard, Graeme Priddle, Jacques Vesery, Binh Pho, John Wessels. Local turners include Alain Mailland, Jean François Escoulen, Laurent Guillot, Jérôme Blanc, Pascal Oudet, and many more. Information is available at aftab-asso.com or email info@aftab-asso.com.

Ireland

September 28–30, Irish Woodturners' Guild National Seminar, Killarney. Demonstrators include Yann Marot, Mary Ashton, Sue Harker, Ashley Harwood, Emmett Kane, John Murphy, and Teresa Murphy. For more information, visit irishwoodturnersguild.com.

New Zealand

October 4–7, New Zealand International Woodturning Symposium, Wesley College, Auckland. Featured demonstrators include Alan Carter, Mike Davies, Kelly Dunn, Douglas Fisher, Alby Hall, Glenn Lucas, Guilio Marcolongo, Niki Marshall, Jasper Murphy, Gordon Pembridge, Liz and Neil Scobie, Molly Winton, and Malcolm Zander. For more information, visit sawg.org.nz or contact Dick Veitch at dveitch@kiwilink.co.nz.

California

June 30–August 12, "Terry Martin Solo Exhibition," Beatrice Wood Center for the Arts, Ojai. Opening reception June 30, meet the artist. For more information, visit beatricewood.com.

Colorado

September 8–9, Rocky Mountain Woodturning Symposium, held at The Ranch/Larimer County Fairgrounds, Loveland. Featured demonstrators include J. Paul Fennell, John Jordan, JoHannes Michelsen, Trent Bosch, and Allen Jensen. For more information, visit rmwt.org.

Florida

Mark your calendars now for the AAW's 27th international symposium in Tampa, June 28–30, 2013.

Georgia

Through July, Woodturning Exhibit at Hartsfield Jackson International Airport, Atlanta. This exhibit, curated by Martha Connell, showcases woodturnings by fourteen well-known artists. Viewing is available to anyone who visits the airport.

September 14–16, "Turning Southern Style XVIII," at the Unicoi State Park Lodge near Helen. Featured demonstrators include Stuart Batty, Dale Larson, and Binh Pho. Demonstrators Nick Cook, Cynthia and Michael Gibson, John Jordan, Mark Sillay, and Dave Barriger will emphasize fundamental skills and techniques. Hands-on instruction will be available. Activities include Instant Gallery and critique session, banquet and auction, spouse/significant other hobby area, and vendor area. More information is at gawoodturner.org.

Illinois

August 3–5, Turn-On! Chicago, Mundelein, IL. Three days with 60 demonstrations, hands-on events, tradeshow, onsite meals and housing, banquet, and auction. Demonstrators include Eli Avisera, Stuart Batty, Dixie Biggs, Bob Rosand, John Jordan, and Kurt Hertzog. For event information, including a complete list of demonstrators, visit turnonchicago.com.

Indiana

September 8–9, Indyfest, a gathering of turners in Middletown. Bring your tools, lathes will be set up. The day will be filled with challenges, collaborations, and contests. For more information, contact Ray at wdwrkrry@gmail.com.

Minnesota

September 2–December 28, "A Walk in the Woods," Gallery of Wood Art, Landmark Center, Saint Paul. Ongoing exhibit is "Touch This!" featuring fascinating facts about wood and woodturning, as well as pieces that you can touch. For more information, visit galleryofwoodart.org.

Montana

October 6–7, Yellowstone Woodturners Symposium, Career Center, Billings. Malcolm Tibbetts will demonstrate segmented woodturning. For more information visit yellowstoneturners.org.

Nevada

June 2–5, Jean-François Escoulen, France, daylong demonstration at the Las Vegas Woodturner Association (LVWA) followed by a three-day, hands-on workshop. For more information, contact Christian Brisepierre, 702-871-0722.

June 23–25, Terry Martin, Australia, all-day demonstration at LVWA, followed by a two-day, hands-on workshop. Contact Christian Brisepierre, 702-871-0722 for more information.

October 18–21, 3rd Segmenting Symposium, Horizon Resort & Casino, Stateline (Lake Tahoe). Demonstrators are John Beaver, Andy Chen, Dennis Daudelin, Ray Feltz, Lloyd Johnson, Bill Kandler, Dennis Keeling, Craig Kirks, Phil Miller, Michael Mode, Dave Peck, Jim Rodgers, Mike Shuler, and Malcolm Tibbetts. Special guest, Bud Latven, will give a PowerPoint presentation of his work. For registration and more information, visit segmentedwoodturners.org.

Pennsylvania

May 18–July 21, "Hooked on Wood: The Allure of the Fish Decoy," Center for Art in Wood, Philadelphia. For more information about this exhibit and events associated with it, visit centerforartinwood.org.

May 18–July 21, "Life Aquatic," work inspired by and in response to the themes of sea life. Artists include Michael de Forest, Satoshi Fujinuma, Michael Hosaluk, Janel Jacobson, Merryll Saylan, and David Sengel. Visit centerforartinwood.org for more information.

September 28–30, Ornamental Turners International Symposium, Hilton Hotel, Scranton. Learn about the ancient and mysterious craft of ornamental turning. This meeting features the world's best ornamental turners, machinery, materials, and works of art. Ornamental Turners International (OTI) is a virtual chapter of the AAW. For more information, visit ornamentalturners.org.

October 13, Cumberland Valley Woodturners host Mark Sfirri demonstration, Kauffman Community Center, Greencastle. For more information contact Bob Robinson at popswoodshop@comcast.net.

Tennessee

January 25–26, 2013, Tennessee Association of Woodturners' 25th anniversary woodturning symposium, Marriott Hotel at Cool Springs, Franklin, just south of Nashville. Featured demonstrators include Dixie Biggs, Jimmy Clewes, John Jordan, John Lucas, and Mike Mahoney. Upcoming details on tnwoodturners.org or email tawsymposium@aol.com or call 615-973-3336.

Texas

August 24–26, 21st annual Southwest Association of Turners symposium (SWAT), Waco Convention Center. Lead demonstrators include Barbara Dill, Cindy Drozda, Michael Hosaluk, Todd Hoyer, JoHannes Michelsen, Joe Ruminski, Hayley Smith, and Steve Sinner. An additional eleven regional demonstrators will be featured for a total of fifty-four demonstration rotations. There will be an Instant Gallery featuring more than 500 turnings and a wide variety of vendors. Last year's symposium attracted 800-plus attendees and this year promises to be even more exciting. For more information, visit our website SWATurners.org or contact SWAT President, Janice Levi at jlevi@rightturnonly.net.

Virginia

September 15–16, Virginia Woodturners' Symposium, Expoland in Fishersville. Featured demonstrator, Jimmy Clewes, will demonstrate both days. Hands-on sessions set this symposium apart from others with 4 rotations of 12 workstations each. Attendees will receive in-depth, up-close, hands-on woodturning instruction from individual mentors. New turners welcome. Visit virginiawoodturners.com/12WA for developing information and online registration.

Washington

July 16–18, Woodturning Rendezvous, outdoors, Ellensburg rodeo grounds, north RV lot (Kittitas Valley Event Center). Bring your mini lathe for unstructured outdoor turning together. Don Derry will entertain on July 17. To secure a campsite, email Julian Lee at julian.s@comcast.net.

July 28, fifth annual Creativity in Woodturning symposium, Komachin Middle School, Lacey, sponsored by Woodturners of Olympia. Featured presenter is David Ellsworth. James Leary starts the day with a session on basic cuts for spindle turning. Registration includes lunch and is $90 until May 31, $100 afterward. Youth under 18 is $10 if registering with an adult.

Four days of hands-on workshops are scheduled for July 29 through August 1. Workshops are $150 and are limited to eight participants. For more information on the symposium and workshops and to register, visit woodturnersofolympia.org or email Al Price at aprice44@aol.com.

The Art of Hosaluk in Woodturning DVD Review

"Never not do what you think of," intones the ringmaster of woodturning whimsy, Michael Hosaluk, who makes a convincing case in this depiction of improbable studio creations coming to life. Even if disaster results, he muses, mistakes become "design opportunities." By tale's end, almost anything seems possible or salvageable.

Drawing on his furniture-making background, Michael demonstrates how laminated and steam bending, clever joinery, and simple jigging can propel lathe forms beyond round cross-sections, traditional symmetries, and even the contortions of off-axis techniques. Meanwhile, added surface color, texture, and decorative line increase the artist's options exponentially.

From the get-go, the renowned humorist makes it clear that he's deadly serious about the craft and precision required to coax bubbling fantasies into tangible, credible art. At one point, he shows how he deftly assembles his familiar sinuous boxes and carefully textures even their hidden interiors. It's a telling moment—not just because it reveals how his craftsmanship ultimately becomes invisible and inscrutable—but because it reflects how the work must first satisfy the maker. In a larger sense, the sectioned, twisting object at hand also embodies the DVD itself, pivoting from segment to segment and avoiding the predictable straight line.

Instruction centers on the spindle, the structural core of Michael's art. His complex trademark containers usually begin with this form, worked initially by roughing and detail gouges outside and hook tools for the endgrain inside. The presentation starts with simpler objects, however, like a throwing top and ball, and advances to offset stacks and fanciful fruit involving bending. Some attention is also given to exterior bowl rings that can be sculpted into feet or points of attachment. The culminating project segments cover three highly articulated and decorated items: a teapot, a set of candlesticks, a curving box. Modules on form, surface treatments, design, and painting round out the instructional portion of the DVD, which concludes with a gallery and a few antic outtakes.

As the focus shifts from topic to topic, we learn much about Michael's general work habits and preferences, including many valuable shop tips. As a lefty, he anchors the tool handle in his left hand during spindle shaping, but switches to a right-hand low grip for hollowing. For vessels with small mouths, he reverses the lathe's spindle rotation and excavates upward on the far side of the work piece. His tucked elbow affords excellent tool control, and upright body position provides good work visibility. Control also figures prominently in his reliance on double bevels for certain tools, particularly his beefy detail gouge. Other aids to precision include hot-glued cauls for safe sawing and drilling of round forms, woodburned outlines to contain surface dyes, and sharpened crescent wrenches that expedite tenon sizing.

In the end, however, good technique must serve something beyond itself. The DVD title invokes the *art* of Hosaluk, after all. The artistic impulse here does not seek fastidious imitation of reality. Rather, Michael abstracts something familiar from nature, architecture, mythology, or personal relationships and gives it his own playful, sometimes mischievous, spin. Mysterious faces emerge and story lines develop in unlikely places. The inanimate becomes animated. Released from inhibitions, the imagination can travel far from its starting place and carry the viewer along.

All in all, this two-disk set succeeds brilliantly as a portrait of an exceptionally versatile and influential artist. Its potential as a convenient shop reference, however, shines a little less brightly. The main issues boil down to length and organization. With a seven-hour run time, this DVD marches on three or four times longer than most of the competition. The only navigational markers are the headings for modules, which average twenty-five minutes each but occasionally last far longer. In a few instances, the headings mislead, as in the section labeled Hollow Turning, which never shows any live action; that takes place in the Teapot segment. The Make a Bowl module focuses only on external vessel support; nowhere in the presentation are bowl gouges and cutting techniques addressed. In short, it is not always easy to find subjects of interest. Detailed liner notes could have gone a long way toward clarifying content and relieving the crammed appearance of the case jacket.

Navigational inconvenience aside, this DVD deserves an honored place in every turner's library. There will never be another maker quite like this one. ■

—David Fry

"Can You See Me Better Now?" Deryl Duer

Have you ever wished that you were better able to see what a demonstrator was doing behind the lathe? In 2002, I attended my first AAW symposium. I had been turning for a less than a year, and I was excited by the opportunity to see and learn from the best woodturners in the world. The first demonstrators I watched were Frank Sudol, Jacques Vesery, Graeme Priddle, Michael Hosaluk, and Michael Lee.

During the first session, I was in the back of a crowded room, seated next to a woman I had just met, Lois Laycroft (Frank Sudol's partner). I complained to her that it was impossible to see what Frank was doing at the lathe, but that I loved his message, "How to Start Your Creative Engine." After Frank's demonstration, I told him how much I had enjoyed his presentation and mentioned my career in advertising studio photography and video production. I went on to say I thought that the A/V presentation could have been better. Frank turned to me, smiled, and said, "Perhaps that could be your contribution to woodturning."

San José symposium

When the AAW reviewed the critiques from last year's symposium, the Board of Directors realized that the quality of the video presentation needed to be upgraded. As a result, this year in San José, the AAW will be rolling out a new high-definition A/V system.

An extruded-aluminum frame that spans over the lathe or workbench is the bones of the system. The top of the A/V frame provides for flexible overhead camera mounting. To offer a top-down viewpoint to the audience, a Manfrotto flex arm and super clamp are used to hold a Sony model 160 HD camcorder with remote zoom. The articulating flex arm allows the positioning of the video camera anywhere along the overhead rails. The remote zoom places the control of the overhead camera where it can be easily reached.

A second Sony camcorder with remote zoom will be used on either a tripod with a fluid-style head, or on a horizontal camera mount. When the second camera is used on the tripod, it will have a 25" cable, and will be positioned on the tailstock end of the lathe. With the long cable, the camera on the tripod can be positioned to obtain the best point of view anywhere around the lathe.

A horizontal clamp-on, double-articulating arm with a pan-and-tilt camera mount can be used to position the second camera on any one of the vertical or horizontal sections of the frame. The frame provides a flexible positioning system, which gives an enhanced point of view for hollowing or special operations.

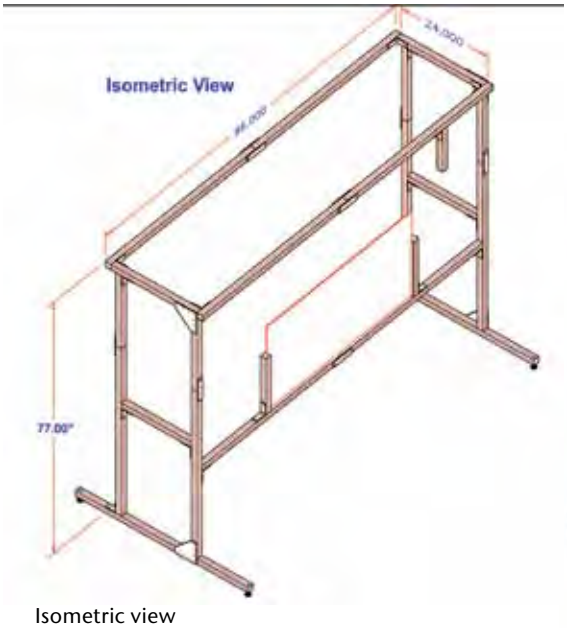
A 15" monitor on a flex-mount arm will allow the demonstrator and the videographer to see what the audience is seeing on the screen.

Safety features

The A/V frame provides two safety features. A lighting system provides appropriate light levels for a safe work atmosphere for the demonstrator. The lighting system will also improve the quality of the video display. Additional horizontal lighting can be clamped to the vertical frame to offer better lighting for hollowing point of view. The second safety feature is a ¼" × 2' × 4' polycarbonate deflection screen. The screen will help protect the audience from flying debris.

Extensive capabilities

The videographer can remotely switch between the different camera feeds or computer feeds to the projector or monitors. The video image shown on the projection system or monitors is controlled using a switcher. The switcher will allow four video inputs



Isometric view
Photo courtesy 80/20 Inc.

A/V video and safety frame

and out feeds. This system can support three video cameras and a computer or four video cameras to feed out to up to four different monitors or projectors. Each video out feed can use any of the four input feeds.

Local-chapter support

The Tennessee Association of Woodturners and the Mid South Woodturners Guild aided with the development of this design, by allowing me to test the concept during their meetings and providing feedback, which has been invaluable to the development of this A/V video frame and shield.

And now, ten years later, Jacques Vesery, Graeme Priddle, Michael Hosaluk, and Michael Lee return as demonstrators at AAW's international symposium. I will be there, enjoying an enhanced view. ■

Deryl Duer has been active in photography and videography production for 35 years and is semi-retired since 2003. He is currently involved in IT consulting and A/V production. For more information about the A/V frame, contact info@turningwoodproductions.com.

Keith Thompkins demonstrates for the Mid South Woodturners Guild.

Photo: Mike Maffitt

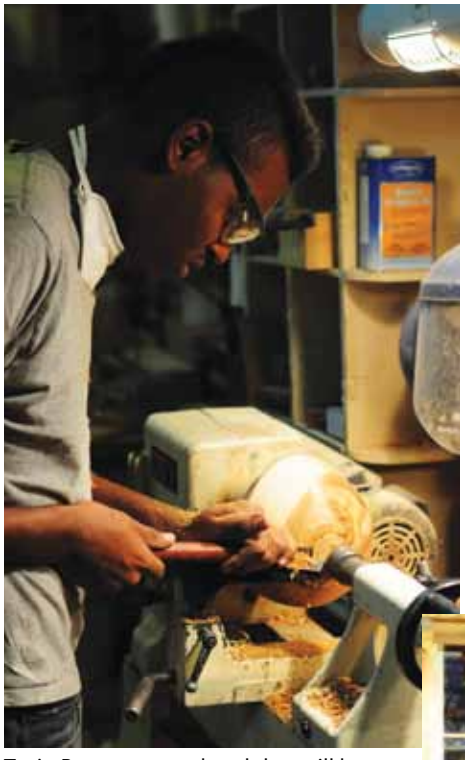
Local chapter members check out the video system and provide input to Deryl Duer.

Photo: Mike Maffitt

Overhead camera is clamped to the upper frame.

HD camera is mounted to a side arm.

Kids Making It (KMI)



Tevin Boone turns a bowl that will be later given to the Food Bank of Eastern North Carolina.

Tevin Boone and Austin Wilson of KMI in Wilmington, NC, turned five natural-edge bowls for the Food Bank of Eastern North Carolina. The food bank used the bowls as Humanitarian Awards. Tevin, now 21, has been with the program since he was 15. Austin joined the program in 2011.

Kids Making It is a nationally recognized award-winning nonprofit organization that teaches at-risk youth woodworking. For more information about KMI, visit kidsmakingit.org. ■

Jeffrey Davies

Tevin Boone (*middle*) and Austin Wilson (*right*) present their bowls to Jeff Rose (*left*) of the Food Bank.

QR Code and the San José Symposium

The 2012 symposium in San José will take place in the heart of Silicon Valley, the high-tech capital of the world. For the Instant Gallery, I created a high-tech woodturning in the form of a slightly dished square bowl with a QR code embedded in the design.

Those of you with smart phones and an app for reading QR codes can capture its message:

AAW Symposium
San José, California
June 2012

Jim Rinde,
QR Code Bowl, 2012,
Maple, black epoxy resin,
2" × 8" (5 cm × 20 cm)

true to form

The Life Work of John Jordan
2012 AAW Honorary Lifetime Member

Kevin Wallace

Untitled, 2011,
Cherry, 8" × 8"
(20 cm × 20 cm)

Aspiring artists create. Established artists teach and inspire. Successful artists—like John Jordan—do all of these. Artists affect others in two ways: *creating* work that inspires and *teaching* aesthetic and technical approaches to benefit aspiring artists. John Jordan excels in both.

This year, in recognition of his contributions to the growth of the woodturning field, John Jordan is being made an AAW Honorary Lifetime Member.

The AAW has been a significant part of John's life. He has been involved with many aspects of the organization, including several years on the Professional Outreach Program (POP) committee. He joined the AAW in its first year, and has attended all the national symposiums. In John's words, "I am privileged to be able to call some of the most talented woodturners in the world my friends. They also happen to be a caring, generous group of people."

A lifetime of contributions

John's contributions as artist and teacher are difficult to separate. He entered the field in what now appears to be a Golden Age of artistic woodturning, when pioneering artists Bob Stocksdale, Ed Moulthrop, and Mel Lindquist were appearing in *Fine Woodworking* alongside the next generation, which included David Ellsworth, William Hunter, and Merryll Saylan. A new language of lathe-turned vessels was emerging, with works defined by an embrace of simple form, exploiting the natural beauty of the material. In a world where woodturning exhibitions can feature dozens of artists and the AAW Instant Galleries boast hundreds of works, it is difficult to imagine a time when the field was small and the work was just beginning to gain attention.

"It all seems like a huge fortune of timing," says John. "I feel incredibly fortunate that when I started, things were where they were. There weren't a lot of people doing gallery woodturning and the field was small enough to allow me a place to get my foot in."

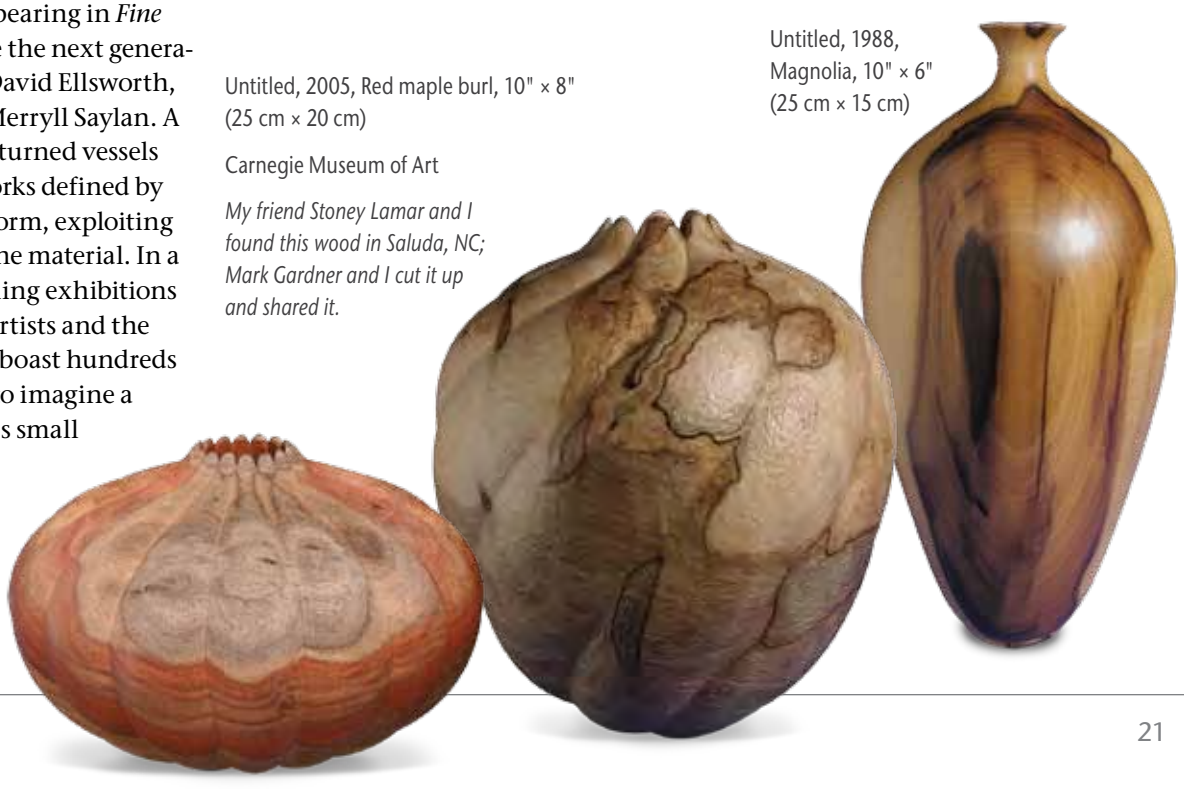
John found his voice early on, and throughout his career his work has been consistent. A John Jordan creation is easily identifiable. The forms are deceptively simple and utilize texture and carving to create visual and tactile contrasts. John excels in subtle changes of surface enhancement.

"My work tends to evolve rather than take quantum leaps," he says. "Achieving that intangible quality, that the piece is *right*, results from putting emotion and feeling into the work. A simple object can be powerful and emotional, just for what it is. My decorative vessels reflect my interest in surface textures, contrasts, and form and the personal responses that I have to them."

John's early work includes endgrained bottle forms with radial flutes carved on the shoulder, lidded jar forms, and tall textured forms. Recent work is often side-grained oriented vessels with a looser quality and feel, and typically feature carved, textured, and wire-brushed surfaces. John sometimes revisits earlier forms and techniques and combines them with more recent textures or surfaces. The organic aspect of a piece of wood has never overpowered the form and sometimes the works are bleached white or dyed black to accentuate the line of the form.

"I am connected to wood, just as a potter is connected to clay. I use fresh-cut logs; the wood is direct and responsive. ▸

The Jordan family home.



Untitled, 1988, Magnolia, 10" × 6" (25 cm × 15 cm)

Untitled, 2005, Red maple burl, 10" × 8" (25 cm × 20 cm)

Carnegie Museum of Art

My friend Stoney Lamar and I found this wood in Saluda, NC; Mark Gardner and I cut it up and shared it.

Untitled, 2010, Carob, 9" × 7" (23 cm × 18 cm)

Arkansas Art Center

Bottle on a Stand, 1990, Boxelder, iron (stand forged by Joe Miller) 15" × 6½" (38 cm × 17 cm)

The Contemporary Museum, Honolulu, Gift of the Lipton Family

With my knowledge of the material, I can exert a great deal of control over the desired result. I am able to work with surface textures and shapes that would sometimes be difficult in other materials. Effective balance of grain and color, such as sapwood highlights, can make a piece stand out. This careful orientation is also important to minimize the movement as the wood dries. When I bring a large section of wood home, I am only concerned with the next piece, not how many pieces I can get from that log. I would rather have one outstanding piece, than ten pretty good ones."

Craft show beginnings

"I applied to a craft show in Memphis and took my work there," John says of the beginning of his career as a professional woodturner. "That's when I quit my job and started doing craft shows. It was a good time for craft shows. There was a lot of enthusiasm and energy. It was great to know that I had a peer group—people who were working and doing similar things in different media. I learned a lot, not only from working craft artists but also from the public: People only buy what they are attracted to."

"I did the shows that seemed appropriate for the time," Jordan continues. "The first were local or regional and I offered work for that audience. As my work improved, I started doing high-end shows, such as those at the Smithsonian and the Philadelphia Museum of Art. There, the quality of the buyers and gallery people was on par with what I was making. Museum curators connected with my work, which led to several acquisitions. Craft shows were a formative part of what I do and I wouldn't trade that experience for anything."

Friendship and aesthetic dialogue

John enjoys spending time with other woodturners outside of shows. Early on he benefited from knowing Helga Winter and Nick Cook. Helga was living nearby in Nashville at the time, and he wanted to get to know her because she was creating interesting work. After meeting, John and Helga were part of a small group that started the Tennessee Association of Woodturners, one of the first AAW chapters. Nick helped simply by letting John hang around with him a couple of days when he first started.

"I got to know Del Stubbs and learned how to make things like the thin-walled goblets," Jordan says. "But there were a lot of artists, William Hunter, David Ellsworth, Todd Hoyer, Michael Hosaluk, who were probably equally influential in one way or another. I always like seeing what Clay Foster is doing, it's often surprising and always good. Al Stirt was an inspiration; I wanted my work to have some

Black Jar, 1992, Wood, 13" × 10" (33 cm × 25 cm)

Renwick Gallery of the American Art Museum, Smithsonian Institution

Untitled, Silver maple, 2005, 13" × 12" (33 cm × 30 cm)

Hruska Collection

Black/White Pair, 2007, Ash, bleach, dye, 13" × 8" (33 cm × 20 cm)

Untitled, 2010, Red maple, 9" × 9" (23 cm × 23 cm)

Books Collection

Untitled, 2010, Rosewood, 13" × 10" (33 cm × 25 cm)

Long Collection

Although I primarily use local woods, I've come to enjoy working with Florida rosewood. I select the logs when I travel to Florida.

of the qualities his has, those subtle, quiet aspects that appeal to the one in ten who stops and carefully looks."

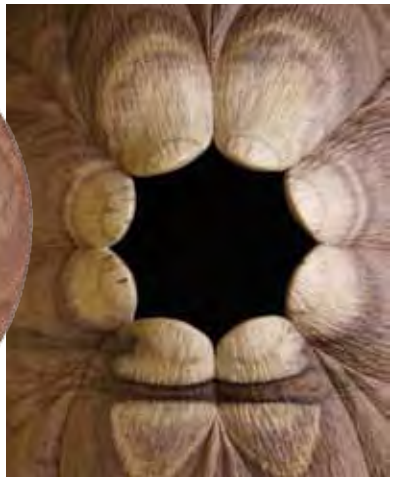
"The most influential are my friends Robyn Horn, Stoney Lamar, and Michael Peterson," Jordan continues. "We're all close and we've worked together in various ways. I like being able to see a little bit of what they see through their eyes, as well as the processes involved. Then there are people I have become close to who have supported me, whether by sharing what it's like to make a living as a craftsperson, or with a great gallery owner like Martha Connell, or with the collectors who have been so supportive over the years."

A pocketful of inspiration

One moment that resonates with John is when he studied a large Philippine ebony bowl by Bob Stocksdale, exhibited in the International Turned Objects Show in 1988. "It was large and had a slightly flattened rim. The edge of the rim had been rotated against the bandsaw to create light striations. The wood was largely black and the striations were shallow, so the effect was subtle. I'm sure that not even one person in ten saw the subtlety, but I did. I knew I was one of the people he made this piece for—I got that. When I see that quality in other work—jewelry, metalwork, or clay—that excites me."

John finds inspiration in the world around him: trees and plants, rock formations, coral reefs and sea life, ancient and modern architecture and pots, baskets, and weaving. "I frequent museums in my travels, and enjoy everything from antiquities to modern art," he says. "I like paintings and sculpture, ethnic objects, as well as custom, antique, restored, and fabricated motorcycles and cars. Anything with pattern, repetition, and texture, including music in many forms. While I don't often incorporate a direct influence into what I do, I think everything about life does influence a person's work. As Clay Foster says, 'It may appear that some people pull ideas out of their pocket, but it's important to ▸

"Of the three true friends I have, one is John Jordan. Robert Louis Stevenson said, 'Quiet minds cannot be perplexed or frightened, but go on in fortune or misfortune at their own private pace, like a clock during a thunderstorm.' Sometimes John is the clock, sometimes the thunderstorm when forced into it, but he always acts on his own sense of values in a quiet way, unperplexed, and unfrightened. I respect and admire John, and love him dearly."
—Clay Foster



Untitled, 2008, Walnut, 8" × 9" (20 cm × 23 cm)

O'Donnell Collection

note they have spent a lifetime filling that pocket.'"

Yet, for John, the most powerful influence at any one time is the work he is currently making. "When I am producing work, it never fails to provoke and provide ideas. I'm continually motivated by my curiosity to see what comes next."

Teaching

When asked why he began teaching, John says, "I always knew potters had to make mugs, or a woodworker had to make weed pots or letter openers, in order to survive. I consider teaching to be a replacement for production work."

Teaching opportunities grew at an astonishing rate. Soon after beginning his career as a woodturner, he was asked to give a demonstration at the Appalachian Center for Craft. Soon, he was teaching weekend workshops, followed by weeklong classes.

"Arrowmont asked me to teach," he recalls. "Not a lot of people were doing that at the time. I don't know how many classes I've taught at Arrowmont over the years—many, though."

When he demonstrated for the first time at the AAW symposium at Arrowmont in 1990, the Who's Who of woodturners were on hand. "I remember that well," he says. "The whole back of the room was lined up with people like David Ellsworth, Michael Peterson, and Todd Hoyer. I figured if I was comfortable demonstrating there, I'd never worry about being nervous working for a crowd."

John has demonstrated in at least forty states for clubs, universities, woodworking shows, and art shows. He has made multiple teaching trips to England, France, Canada, New Zealand, Japan, and Australia. "Teaching probably accounts for one-third to one-half of my year," he says. "I was recently invited to Bogota, Colombia, where I'll be teaching in a school with young people who are learning a craft to make a living. I'll be there at least a month. That's pretty exciting."

One of the most rewarding aspects of John's teaching is being regularly approached by individuals who tell him that they first met him years ago in a class, thanking him for the influence it

Untitled, 2002, Boxelder, 10" × 10" (25 cm × 25 cm)

Victoria & Albert Museum

"Whenever I hear of someone wanting to learn how to turn, I tell them to go see John Jordan before they have an opportunity to develop bad habits. He's the absolute best I've ever seen handle a tool. His work is exquisite and he has made a tremendous contribution to the wood field with his expertise. He and Vicki are truly genuine people, and the kind of friends you can count on whether wood is involved or not."
—Robyn Horn

had on their woodturning. John influenced many leading figures in the field in their career. Betty Scarpino says, "I first met John when I was taking a class at Arrowmont from Michael Hosaluk in the mid 1990s. Mike invited John to visit (John lives close to Arrowmont). He arrived on Wednesday, stayed the rest of the week, and offered several informal demonstrations in between quietly carving and sharing his approach to embellishing. I learned techniques from John that I still use in my work."

John sums up his teaching philosophy, "My emphasis is on teaching techniques for producing work that involve using simple tools and methods, to gain complete understanding of material and tools, along with control and finesse. This approach is preferable to complex methods and brute strength."

Home and studio

For the past thirty-four years, John and his wife, Vicki, have lived on a 28-acre farm in a home built in 1806. Their children are the eighth generation to be associated with the house. The dwelling represents an ongoing challenge, requiring John to engage in what he refers to as "real woodworking." For the first few years, John created his work in a little room off of the porch, but in the 1990s, he completed a 1,000-square-foot modern shop near the house. The building features floor-to-ceiling windows on the north wall and is painted bright white throughout, with gray floors and heat and air conditioning.

An artist benefits from ideal working conditions, so John added a new turning/carving room, as he started accumulating more metalworking equipment and materials. "It's best to keep the wood and metal separate," John advises. "I keep no wood, logs, or blanks in the shop and studio, which helps keep it clean. I used to have a lot of lathes because I taught classes here for a while, but now I have just one," John continues. "I use a minimum of equipment, relying on a few good tools." His studio is a bright, clean space, which has a positive impact on his work and state of mind.

Momentum

A few times a year, in anticipation of upcoming exhibitions, John acquires fresh wood and roughs out vessel forms. "The turning is relative quick compared to the carving," he says. "I find that momentum is a fairly important part of what I do. When I return from a trip and get back to work, I start slowly . . . it's hard to just jump into turning. By the same token, when I'm immersed in my work and have momentum, it's difficult to stop. No matter what is going on in other aspects of my life, when I am turning or carving, I'm happy."

Woodturning is John's sole source of income. He has managed to support his family for twenty-five years as a woodturner, putting his two children through college. He also makes specialty hollowing tools that he sells at workshops, through retailers, and on his website.

"It's basically a lifestyle," John says. "Most of my close friends are woodturners or artists in other media. A large part of our family's life is planned around my work. My wife is a partner in the enterprise, and while Vicki doesn't often get directly involved in pieces, she's essential in every other aspect; it would be impossible to do it without her hard work and support."

John produces fifty to sixty one-of-a-kind pieces a year for a market made up of collectors. He rarely produces work on commission, but keeps in mind the expressed interests of various collectors. "I have to produce the sort of work that I've got my heart in," he says. "When you can create things that people like and that you enjoy making—and are able to make a living—it's a great thing. I'm still amazed when I complete each piece. There's a sort of wonderment and appreciation and I think, "This is a nice piece I've made." It makes it all worthwhile. ■

Kevin Wallace is Director of the Beatrice Wood Center for the Arts, Ojai, CA.

John Jordan turning during a demonstration.

Compliant Vacuum Chucking System

John I. Giem

A new technique, compliant vacuum chucking, enables turning gnarly burls like this without having to cut into the rough surface.

A new technique, which I call *compliant vacuum chucking* (CVC), enables turners to mount and turn burls and other blanks with irregular shapes and voids while leaving the rough surface completely untouched. This new approach combines a few common materials with a conventional vacuum chuck to create a plastic membrane that conforms closely to the shape of the workpiece. It is as if you made a mold in sand or plaster.

Unlike most other methods of mounting wood on the lathe, vacuum chucking does not require cutting or penetrating the wood, once you've made a smooth surface for interfacing with the vacuum chuck. The conventional vacuum chuck resembles a bowl mounted on the headstock spindle with its rim toward the tailstock. A resilient material such as closed-cell foam provides a seal between the chuck and the turning. When the vacuum pump extracts the air from within the chuck, the differential pressure holds the turning in place. For this to work, both the seal against the wood and the wood itself must be smooth and without holes or ripples. If this is not the case, the setup will leak air. The item to be mounted becomes part of the vacuum system.

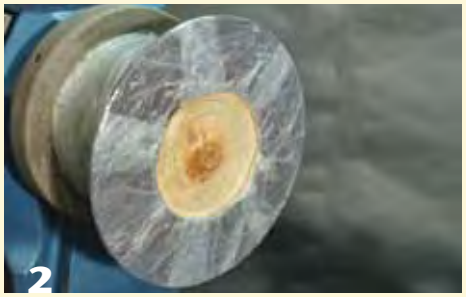
Compliant vacuum chucking does not depend on the smoothness of the blank itself to create a vacuum seal. I got the idea for this system from a technical article about a robotic gripper that presses a bag of granular material around an object. The vacuum compresses the material into a rigid mass that conforms to the object, like coffee vacuum-packed in a bag. The ground coffee is a rigid lump while it is under vacuum but turns into flowing granules when the vacuum is released. This is the basic idea behind the CVC system.

Although compliant vacuum chucking complements the conventional vacuum chuck, it does not replace it. Happily, augmenting a vacuum chuck for this technique doesn't damage it or prevent it from being used conventionally.

I'm using the idea in two ways. The first is a compliant mandrel that molds itself to the shape of the turning, which is then held in place by tailstock pressure (*Photo 1*). This method gives you tool access to most of the exposed face, so you can shape the rim and sides of the blank. The second is a compliant chuck that uses a

1

The compliant vacuum mandrel, with pressure from the tailstock, cradles the burl for rough turning and shaping the outer rim. The mandrel consists of plastic stretch film over a conventional vacuum chuck that is filled with rice.



2

The compliant vacuum chuck uses a force ring to hold the blank around its rim, providing unobstructed access for hollowing. The ring wrapped in shrink film presses the turning into the rice-filled vacuum chuck.

3

To demonstrate the technique, this burl blank is to be turned without damaging the gnarled bottom surface. Like coffee in a vacuum-packed bag, the rice is hardened by the vacuum to the shape of the turning.

force ring to capture the turning by its rim, allowing access to the remaining surface for hollowing (*Photo 2*).

Both the mandrel and the chuck use the vacuum to mold a plastic film covering a granular material (I use rice) so it conforms to the turning. In this system the plastic stretch film provides all vacuum sealing, with the smoothness or soundness of the workpiece playing no role. The system is simple in concept but there are a few details to address in order for the method to work reliably. To demonstrate, I chose a burl with an interesting gnarled outer surface that I wanted to retain without any damage (*Photo 3*). The cut surface was to be smoothed up and hollowed.

Materials for compliant vacuum chucking

- A conventional vacuum chuck, about the same size or a bit larger than the object to be supported
- Plastic stretch film (This material comes in rolls; I use 5" (13 cm) and 20" (50 cm) widths. Office supply stores sell it for wrapping and bundling items to be shipped.)
- Rice, sand, or other clean granular material
- Several cloth bags (*See Materials notes sidebar*)
- Filter to prevent rice from going into spindle, made from coffee-filter paper and screen wire
- Thin plywood, Formica, or Masonite to make the force ring. (The protective ring can be of cardboard.)
- Miscellaneous heavy rubber bands and tape

The compliant vacuum chuck requires two widths of stretch film, plus a plywood force ring. The standard vacuum chuck mounted on the carving stand is filled with rice. The burl turning at right is partly complete thanks to the compliant vacuum mandrel.

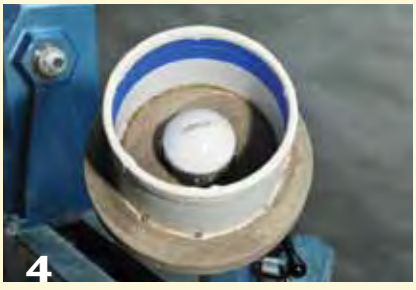
Making the compliant mandrel

Start with a standard vacuum chuck about the same size as the blank to be held and put a filter over the hole going into the spindle (*Photo 4*). To make the filter, I drilled four ½" (13 mm) holes in a PVC cap and covered them with a filter made from a layer of screen wire covered with a layer of coffee-filter paper. The screen wire goes toward the spindle so it can support the filter paper. Seal the entire edge of the filter with thick CA glue. Position the chuck with the rim facing up and fill it with clean rice (*Photo 5*). With experience, you will learn what level of rice works best for the blank at hand.

To create an airtight membrane that will completely enclose the rice and chuck, wrap several loose layers of the wide plastic film across the face of the mandrel in different directions and trim as needed. Next wrap the narrow plastic film clockwise around the chuck, making several tight turns to seal the wide wrap. Do not wrap the wide film tightly against the rice but leave room for movement (*Photo 6*). Be sure that there are two or more layers of film over the rice where the turning will be placed. Cut the film free from the roll and, moving in a clockwise direction, hand-smooth the plastic film onto the chuck and rice. The layers of film will stick together to form the airtight membrane. Always wrap and smooth clockwise so the film won't unwrap when the lathe runs.

Some blanks need additional support around the rim of the chuck. Plan for it by wrapping a layer or two of film around the chuck with the top edge protruding a couple of inches above the rim. You can put more rice inside this collar of film for additional support (*Photo 7*).

Mount the assembly of the rice, chuck, and film onto the lathe spindle (*Photo 8*). Bring up the tailstock to help press the ▸



4

The vacuum chuck is ready for filling with rice. The white dome in the center is a 2" (5 cm) PVC pipe cap fitted into a groove cut into the base of the chuck. It has four ½" holes drilled around the perimeter to allow airflow into the spindle. A shopmade filter keeps the rice out of the spindle.

5

Grains of rice poured into the chuck will support the plastic film and the burl blank. The vacuum will draw the loose grains into a solid mass.

6

Wrap plastic stretch film around and over the surface of the rice and the chuck. Wrap the film in a crisscross pattern so it overlaps and covers all surfaces. The film stretches and clings to itself and the chuck, forming a vacuum-tight seal.

Wrap a couple of layers of film that extend up beyond the rim to help nestle extra rice around the burl later in the process.

Mount the completed compliant vacuum mandrel assembly onto the lathe spindle. You might need Teflon tape on the spindle threads for a good vacuum seal.

Press the burl blank into the plastic film and the rice. The compliant surface molds itself to fit the surface of the burl. Bring up the tailstock to help position the blank and hold it in place.

Removing the burl while leaving the vacuum switched on reveals how the film and rice conformed to its gnarly surface.

Advantages of compliant vacuum chucking

- Almost any shape blank can be mounted on the lathe without using glue, turning a tenon, inserting screws, or otherwise cutting into the wood.
- It allows mounting and turning items too small for conventional vacuum chucks.
- The system is insensitive to holes, perforations, or imperfections in the workpiece, and the region where the force ring contacts the turning may be irregular in shape.
- Only the plastic stretch film provides all vacuum sealing.
- The system is scalable to a wide variety of turning projects.

turning blank into the plastic film and work it down into the rice (*Photo 9*). To properly position the blank, make sure it rests completely on plastic-covered rice. If the workpiece contacts the rigid chuck surfaces, it may be difficult to position and it could wear a leak through the film. If you do get a leak anywhere, repair it with additional layers of stretch film while the vacuum is still applied. The vacuum gauge will show when the leak has been repaired.

Tailstock support is essential to press the workpiece into the vacuum-hardened rice; there is no direct vacuum drawing the burl toward the headstock. When the bottom of the blank is irregular, as with the burl in the photos, its shape holds it in place (*Photo 10*). When the bottom of the blank is relatively smooth, you can add stability by using a vacuum chuck large enough to bed the blank deeper into the rice.

The final positioning of the blank within the compliant mandrel takes some experimenting. When you start to apply a small vacuum, the plastic film will begin to compress the rice. When you rotate the spindle the rice will shift, providing slack for adjustment. By tweaking the vacuum level, you can keep the rice compliant so that you can push it around like putty. Be sure to keep the tailstock and live center tightly pushing the blank into the rice. When satisfied with the position of the blank, apply full vacuum.

Verify that the turning is securely held by the mandrel without any movement. The initial application of the vacuum will tend to pull the rice away from the surface of the turning blank. If unacceptable movement is detected, reduce the vacuum (to around 5" Hg) low enough for the rice to be pliable. Tighten the tailstock and rearrange the rice as needed to provide proper support then apply full vacuum. As discussed in the safety sidebar, you can tape a protection ring over the plastic film to reduce the risk of damage.

Slowly ramp up the lathe's speed and have fun shaping the rim and perimeter of the blank. It may be necessary to leave the rim thicker than normal since you need to have a surface for the force ring later. On some projects, after using the compliant vacuum chuck to hollow out the interior, I returned to the compliant vacuum mandrel, remounted the turning and continued to work on the rim and walls.

Rice was used with this compliant vacuum mandrel and chuck but other granular materials may work also. Experiment with clean sand, plastic pellets; I did not succeed with ground coffee, however. The main criteria are that the granular material must compress and interlock within the plastic sheeting when a vacuum is applied, unpack and flow freely when the vacuum is released, and it should not contain a lot of fine particles or dirt.

Fine particles can collect on the filter, pack up, and restrict the flow of air.

Making the compliant chuck

The compliant vacuum mandrel is useful for initial roughing and shaping the rim and perimeter of your turning blank without damaging the other surfaces. To complete the turning, convert the mandrel into a chuck that will hold the turning by its rim, allowing full access for hollowing and finishing (*Photo 11*).

The compliant chuck uses the same basic materials as the mandrel, with the addition of a plywood force ring. The force ring will be on top of the blank, but under the plastic sheeting, to hold the turning in place (*see Materials sidebar*). Size the force ring center hole to overlap the outer rim of the turning blank. The surface the force ring touches does not need to be continuous, smooth, or flat. Under load, the force ring may bend and crack, which is okay as long as it continues to hold the turning and does not cause any vacuum leakage. Trace the force-ring's center cutout onto the burl's rim to confirm this is the area you want to hollow out (*Photo 12*). The drawn circle will help you position the blank later.

When the blank is mounted in the compliant vacuum chuck, you will not have access to the outer surfaces. Therefore, make a sketch with measurements to help plan the depth and shape of the interior. As before, position the vacuum chuck facing upward partly filled with rice. Place several layers of wide plastic stretch film on your work surface. You're going to need enough film to extend down over the sides of the vacuum chuck after wrapping around the blank and up through the force ring (make it big, it can be trimmed later). Place the turning on the center of the layered film. Place paper clips at several locations around the perimeter of the ▸

The compliant vacuum chuck retains the turning with a plywood force ring wrapped in plastic stretch film. The vacuum pulls the force ring and the turning into the rice-filled mandrel.

Materials notes

Plastic Stretch Film

While developing the compliant vacuum chucking system, I experimented with the plastic stretch film in other applications. With porous wood that leaks excessive air, wrapping it with the stretch film (or with plastic wrap from the kitchen) can significantly reduce the leakage. It is not necessary to leave the area to be turned uncovered, because a sharp bowl gouge will cut easily through the film. In one case, when I mounted a freshly turned crab apple bowl on a conventional vacuum chuck there was enough leakage through the wood that I could only achieve 4" Hg. When I covered the entire bottom of the bowl with plastic food wrap, the vacuum increased to 19" Hg. Using a sharp bowl gouge, I trimmed off the tenon and shaped the bottom of the bowl. I did not remove any of the film but just cut through it while shaping the wood.

Rice

I've been using rice as the granular material and I've left it out in the open so it shows in the photos. What the photos don't show is the rice explosion that can follow a cut in the plastic film. I soon learned to confine the rice in loose cloth bags. The key is to choose a flexible cloth that is light enough to allow easy passage of air, but fine enough not to leak rice. The bag should be large enough to be only half full, and you can use more than one bag to fill the chuck. Although the bags make it more convenient to manage the rice, gaps between bags might put the unsupported film at risk of rupture.

Force Ring

The vacuum causes a differential pressure between inside and outside the chuck, pushing the plastic inward and pressing on the force ring, which in turn generates a significant force to hold the blank in place. The force ring can be made of any smooth, thin, and rigid material, such as plywood, Formica, or high-density fiberboard.

Assume the vacuum generated is 18" Hg (small leakage), which will produce a differential pressure inward of about 9 psig. The force ring is 4¼" in diameter with a 2"-diameter hole. The resulting area of the force ring A is the area of a 4¼" disc minus the area of a 2" disc, so A = 11 square inches.

force = area × pressure, f = 11 × 9 = 99 pounds

That is the force the ring is using to press the turning blank into the chuck. Want more force? Make a larger force ring. The force produced depends entirely on the area of the ring, not on the size of the workpiece nor of the vacuum chuck itself.

When a blank leaks air, try placing plastic food wrap over it. Before applying the film to this green-turned crab apple bowl, the vacuum level was 4" Hg; with the film smoothed out and taped down at the edges, it increased to 19" Hg.

Loosely confining the rice in cloth bags makes it easier to handle and less of a mess in the event of membrane failure.

Place the force ring over the burl to verify its size, position it, and trace its inner cutout onto the wood. This will help you align the setup later.

Spread out and crisscross several layers of 20" stretch film. The paper clips on the perimeter will help manage it later.

Gather the large square of film around the turning blank and hold it with a rubber band.

Place the wrapped burl on top of the rice-filled chuck and slip the force ring down over the film and onto the rim of the blank. Add rice as needed around the blank.

Remove the rubber band and spread the film down and around the vacuum chuck.

Smooth the plastic stretch film around the sides of the vacuum chuck, and hold it in place with a rubber band. Trim the film to the rubber band.

plastic film; they'll help you handle the film later (*Photo 13*). Pull the plastic up over the blank, gathering it together and holding it with rubber bands or tape (*Photo 14*).

Settle the wrapped turning into the rice that's inside the chuck. The deeper you insert the turning, the better the rice can support it. Place the force ring down over the gathered plastic onto the rim of the turning blank (*Photo 15*). The film is now between the force ring and the blank. Check the level of the rice. It should come close to the force ring but not support it. Carefully remove the rubber bands holding the plastic and fold the plastic down over the force ring and over the edge of the chuck (*Photo 16*). The paper clips will help you separate and smooth out the film; leave a little slack in the plastic to help you reposition the blank. The surface to be hollowed and shaped should be exposed in the center, but surrounded by the force ring and plastic film. Use a large rubber band to hold the film in place against the side of the chuck. Use scissors to trim the film about halfway down the chuck's side. Smooth out the film with your hand. Using the narrow plastic stretch film, wrap around the chuck in a clockwise direction, covering from the hub and extending slightly past the rim of the chuck. Cut off the film and smooth it down (*Photo 17*).

Reviewing, the plastic film is under the turning, wraps around the side, over the top edge, up through the force ring, out over the ring's rim and then down onto the sides of the chuck. When the vacuum is applied, the rice conforms to the base of the turning blank to support it and the force ring is pushing the blank inward. Verify that the space immediately below the force ring is open so that it can be pulled down on the blank by the applied vacuum. If the film contacts the underside of the force ring or gets in between the ring and the chuck rim, it may interfere with the vacuum. Wrapping the film in the clockwise direction ensures that, when the lathe is running, the air does not catch any free ends causing the film to unwrap (*Photo 18*).

With the chuck assembly mounted on the lathe spindle, bring up the tailstock live center to help hold and position the turning blank. With the tailstock tight, position the turning by rotating the spindle, pushing the blank into place, and modulating the vacuum so the rice complies (*Photo 19*). When you get it right, apply full vacuum to hold the blank in place. It is okay if the force ring touches the rice, so long as it continues to hold the blank. Check the blank for movement and adjust as necessary. Tape a protection ring over the plastic and turn the wood as you normally would, taking light cuts (*Photo 20*). Be sure to monitor the vacuum gauge just in case you nick the plastic or otherwise develop leakage.

Be sure that all surfaces that make contact with the plastic film do not have sharp edges or points. If these cannot be removed by sanding, then reinforce the film with more layers or with tape. The rice provides support for the plastic film and a conforming base to hold the

turning. Too much rice could hang up the force ring, preventing it from applying enough force. Too little rice could allow the plastic film to balloon inward and burst. Experience will help you adjust the rice levels correctly.

Mounting small objects

With small objects, the forces generated by a conventional vacuum chuck may be too low to be useful. For example, an object with a diameter of 2" will have an area of 3.14 square inches. Using a vacuum level of 20 in. Hg gives approximately 10 psig.

force = area × pressure = 3.14 × 10 = 31.4 pounds

This small force cannot reliably hold the workpiece onto the conventional vacuum chuck. The compliant vacuum chuck breaks this barrier, because the force increases along with the size of the force ring (*see Materials sidebar*). In this example, making the force ring 4" in diameter with a 1.5" diameter hole for the 2" object gives an area of 10.8 square inches. Using the same 20" Hg vacuum:

force = area × pressure = 10.8 in^2 × 10 psig = 108 pounds

More than enough, an increase of three times over the conventional chuck.

How well does it really work?

I've done enough work with the compliant vacuum chucking system to believe it is reliable for jobs like the ones described here. It's very flexible and it can manage irregular shapes, so long as they don't fall though the force ring. I hope other turners will add further refinements and improvements. Using compliant vacuum chucking, I mounted and shaped the burl into a bowl without gluing, cutting, or drilling into surfaces other than those that were intentionally hollowed. The bottom gnarled surface was untouched and undamaged. I have turned many projects successfully, including natural edge bowls, and I have developed several techniques to help accurately position turnings in the chuck. I am learning something new every time I use this system. ■

Safety

Working with chunks of rapidly spinning wood on the lathe is inherently dangerous. Always wear a faceshield and breathing protection. Compliant vacuum chucking is a new concept without a lot of experience. So far, the failure modes of losing vacuum and tool catches seem to be less dramatic than with conventional vacuum chucks. However, a major cut through the plastic can cause an interesting dispersion of rice everywhere, along with launching of the turning blank. I recommend taping a protection ring of cardboard or plywood onto the plastic to reduce the risk of nicking the plastic film.

A protective ring taped onto this compliant vacuum chuck protects the plastic film from accidental cuts by the turning tools.

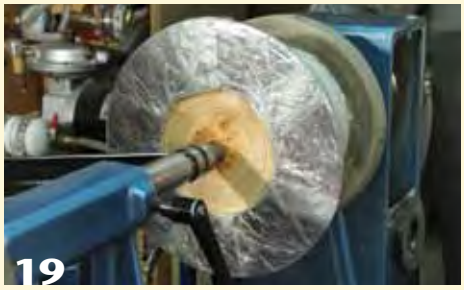
Don't rely on the vacuum gauge—also check the plastic film to verify that it is tightly pressed against the rice and turning blank. If the granular material contains fine particles, they can build up against the filter and block airflow from small punctures and cuts. Consequently, the actual vacuum within the chuck can be less than shown on the gauge, which may lead to inadequate support.

References:

- "Understanding—and Improving—Vacuum Chucking Systems," John I. Giem, *AW,* vol 26, no 1.
- "Universal robotic gripper based on the jamming of granular material," Eric Brown and others, proceedings National Academy of Science, November 2, 2010, vol. 107, no. 44, 18809–18814.

John Giem, a longtime woodworker living in northern Colorado, is an officer of the Rocky Mountain Woodturners. He can be contacted at jgiem@comcast.net.

Mount the assembly on the lathe spindle and smooth everything down tight to seal the vacuum chuck. Smooth clockwise so the lathe doesn't unwind anything.



Bring up the tailstock for support and position the blank so the pencil line aligns with the force ring. Slowly turn on the vacuum and readjust as needed.

Using light cuts, hollow out the blank and sand it, being careful not to damage the plastic film.

Foolproof Method to Determine the Thickness of a Bowl's Bottom

Dick Powell

For a long time, I've struggled with not knowing the exact thickness of the bottom of a bowl as I turn and shape the inside. Using a pencil gives a good eyeball approximation. Calipers are okay; however, if there is a significant amount of wood left on the outside or if I'm not sure yet what the foot will look like, calipers are no better than a good approximation.

A couple years ago, I came up with a foolproof method that is precise. Since then, I have yet to make a funnel out of what was supposed to be a bowl.

I turn on a OneWay 24/36 lathe, but this method should work on any lathe.

Make a block of wood

The key is to make two blocks of wood that will be placed in between the ways of your lathe, next to its headstock. Cut the lengths to exactly the distance measured from some known and fixed point. In my case, I use the base of the headstock, which is firmly and permanently attached to the lathe's bed. Cut the wood so that it fits on the lathe's bed and does not fall off (*Figure 1*).

For the first block: If a bowl is attached to the lathe with the foot/tenon in the scroll chuck (*Figure 2*), set a square on the lathe's bed and flush against the face of the chuck's jaws. The length of the block is exactly the distance from the base of the headstock to the square.

For the second block: If using jumbo jaws to finish the foot (*Figure 3*), this distance is probably not the same as the first block. Set the square flush against the face of the jumbo jaws. The length of the block is exactly the distance from the base of the headstock to the square.

The precise length of each block is critical. Be sure to note on each block which set of jaws it fits.

To use the block for measuring

With the bowl's foot/tenon held by the chuck, simply put the first block on the lathe's bed, flush against the headstock. Set the square on the lathe a convenient distance from the end of the block. Measure and remember that distance (distance *a* on *Figure 2*). Without moving the square, measure the distance from the bottom of the bowl to the square (distance *b*). Subtract distance *b* from *a* and you now know how far the bottom of the bowl is from the jaws.

For example, if the square is 5" from the end of the block (distance *a*) and the distance from the square to the bottom of the bowl is 4" (distance *b*), then, subtracting *b* from *a*, the bottom of the bowl is 1" from the jaws.

If the bowl has walls ¼" thick and you want the foot to be ½" thick, then you can remove another ¼" of wood until *a* minus *b* equals ¾".

Finish the foot

To determine the thickness of the bowl's bottom when finishing the foot, there is one other object to make. With the jumbo jaws mounted onto the lathe, insert a ½" dowel through the spindle (the spindle of my lathe is hollow, as are most). Insert the dowel so that the end is flush with the face of the jumbo jaws. On the left end, wrap blue tape around the dowel and on that tape, permanently mark the exact location of the end of the spindle.

Mount the bowl onto the jumbo jaws so that its foot can be finished.

Slide the dowel through the spindle until it touches the inside bottom of the bowl. Note on the end of the dowel the location of the end of the spindle and measure the distance from this point to the mark made on the blue tape. This is the bowl's depth, distance *x* on *Figure 3*.

Slide the block *x* distance from the base of the headstock. The end of the block is now even with the bottom of the bowl. Use a spring clamp to keep this block in place.

Set the square on the lathe a convenient distance from the end of the block, measure, and remember that distance (distance *a*). Without moving the square, measure the distance from the bowl's foot to the square (distance *b*). Subtract *b* from *a* and you know the thickness of the bowl's foot.

For example, if the square is 3" from the end of the block (distance *a*) and the distance from the square to the bowl's foot is 2" (distance *b*), then, *a* minus *b* indicates the bowl's foot is 1" thick. If the walls on the bowl are ¼" thick, then you have ¾" thickness for making the foot.

Spend a little time getting the dowel (used with the jumbo jaws) and the blocks of wood precisely made and they can be used for years. This method is quick and simple and has never failed me. As I'm making shavings, I'm confident I know exactly how thick the bowl bottom is and how much room I have to either increase the depth of the bowl or how thick I can make the foot. ■

Dick Powell is the public outreach forester for Starker Forests (starkerforests.com) and works in the forests of Oregon's Coast Range. Most of the wood he turns is scrounged from scraps that are left after a timber harvest. Dick is a member of the Willamette Valley Woodturners.

Figure 1. End view

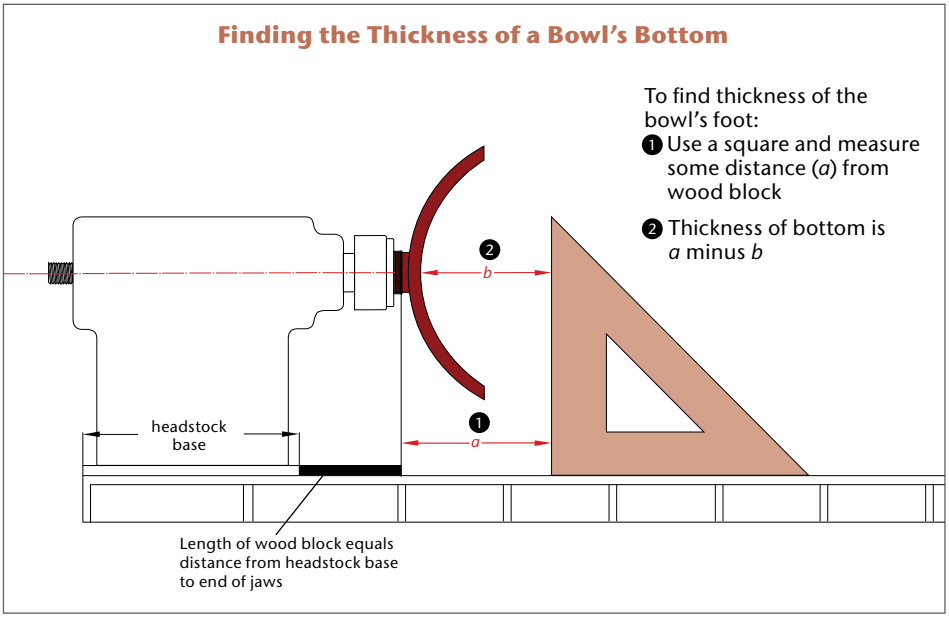


Figure 2.

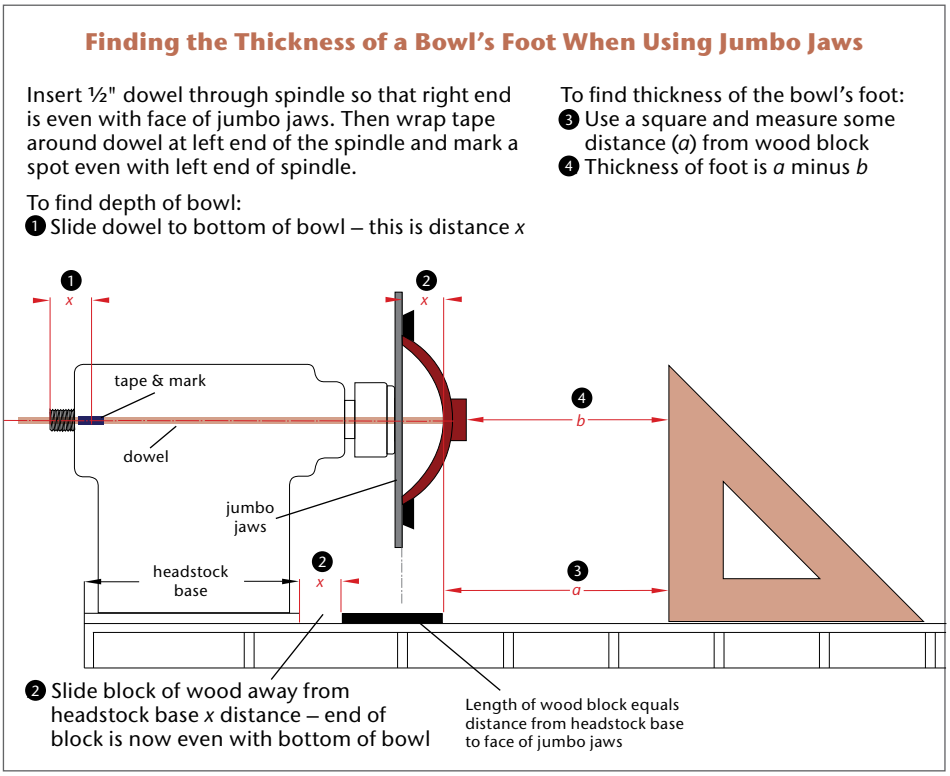


Figure 3.

Stainless Steel Toolrest Adapter

Joe Cokl

I dress up my toolrest often with a file to remove nicks and cuts made from turning tools. In order to extend the life of my toolrest, I developed a stainless steel adapter, which would be applicable to most toolrests.

I purchased a length of 3/16" thick by 1" wide by 6' long (4.8 mm by 25 mm by 1.8 m) stainless steel from Grainger for $30 and there is enough to make five 14" (35 cm) adapters, the length of the one that came with my Powermatic 3520.

You can pick up the 10/32" (8 mm) machine screws at any hardware store. I used stainless steel countersink-type.

This project took 2½ hours, including cleanup. Take your time, though. It's important to be as precise as possible.

Prepare the stainless steel

Cut the bar stock to match the length of your toolrest. I applied blue Dykem fluid on the stainless steel for better viewing of the scribe lines. In the remainder of the article, I will refer to the bar stock as an *adapter* (*Photo 1*).

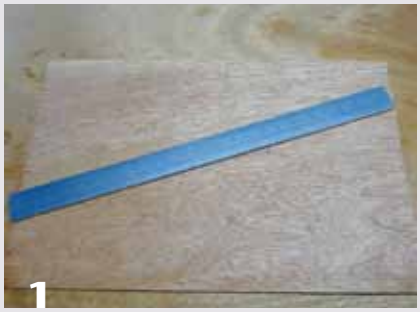
Scribe a centerline along the length of the adapter from end to end. Find the exact center of that line and center punch the spot (*Photo 2*). Measure out from this center punch every 2" (50 mm) on both sides and scribe cross lines (*Photo 3*).

Center punch each one of these cross lines. Double check your measurement for accuracy—it is important that each side from the center matches exactly (*Photo 4*).

Drill a small 1/8" (3 mm) pilot hole at each one of these center punch sites (*Photo 5*). Drill the pilot holes to 3/16" (4.8 mm) diameter (or whatever size screws you are using). These holes should be a snug fit to the screws.

After you have drilled all the holes in the adapter, lay it on your toolrest in the precise location you will want it to be when finished. Place a mark through the center hole of your adapter onto the toolrest; make sure this mark is exactly in the center of the hole. You can do this by using the 3/16" drill bit to drill a slight dimple in the toolrest through the adapter.

Remove the adapter and drill a 1/8" pilot hole at this center spot. Then, drill the hole with the proper drill bit



1 A length of stainless steel bar stock with blue Dykem fluid painted on it is ready for marking and drilling.

2 Find and mark the center of the adapter (length and width). Scribe a line from one end to the other; make sure the line is accurately centered.

3 From the centerline, carefully measure every 2" (50 mm) on each side and mark with a cross line.


4
Center punch each of the cross lines.


5
Drill a pilot hole at each center-punched site.


6
After precisely transferring and marking the location of the center hole from the adapter onto the toolrest, drill a ⅛" (3 mm) pilot hole. Tap that hole for the size of the machine screw you have selected. (This photo shows all of the holes drilled, but for now, only drill and tap the center hole.)

for a 10-32" tap. Tap this hole for the machine screw (*Photo 6*).

Place the adapter onto the toolrest and install a screw into center hole to hold the adapter in place (*Photo 7*). Place a mark onto the toolrest through each one of the holes you have drilled in the adapter. Do this by using the 3⁄16" drill bit and drill a slight dimple into the adapter as before.

Remove the adapter and drill a ⅛" pilot hole at each one of these marks. Drill these holes with the proper drill bit for a 10-32" tap. Tap all the remaining holes and mount your adapter (*Photo 8*).

At this point I drilled a countersink at each one of the holes in the adapter, just enough to lower the screw heads so they will not be a catch point (*Photo 9*). Do not overtighten the screws; you can strip the threads.

Install your adapter onto your toolrest. Using star washers on your screws will keep them from vibrating loose. Your toolrest is now ready for use with your new stainless steel adapter (*Photo 10*).

If your measurements were exact and the holes drilled accurately, you will be able to flip and rotate your adapter and use all four edges, extending the life of the adaptor, as well as your toolrest. ■

Joe Cokl has been turning for about 12 years and sells his work through art and craft shows in Washington, as well as a gallery in Arizona. He loves turning what he used to think of as firewood into beautiful bowls and vases.


7
Place the adapter onto the toolrest and install a screw into the center hole to hold the adapter in place. Carefully mark the location of the holes on each side of the center hole. Remove the adapter and drill and tap each hole into the toolrest.


8
Mount the new toolrest adapter and check for an accurate fit.


9
Remove the screws and countersink each hole. Reattach the adapter.


10
Your new toolrest is ready for use.

A Study in Design Evolution

Refining a Music Stand and Ironing Out Kinks

Jamie Russell

When I started building furniture in a serious way in the 1980s, many of the superstars of that era, including Californians Art Carpenter and Sam Maloof, had a music stand in their repertoire. It is an excellent production piece for an affluent niche market.

In 1984, I undertook an informal apprenticeship through the Baulines Craft Guild in the shops of Art Carpenter and Stuart Welch. Largely due to Art's influence, I went through a phase when everything I designed used bent laminations. Between 1982 and 1989 I made a series of music stands that featured bent-lamination construction and a sliding dovetail height adjustment.

The Fiddlehead music stand is my most successful design from that period. I have made more than 200 of them. When I decided to come up with a new design for music stands, my first thought was to go to steam bending and stick with curved members. However, I have become less patient in my maturity and went back to my origins for a simpler design solution that uses turned and carved elements.

Starting point

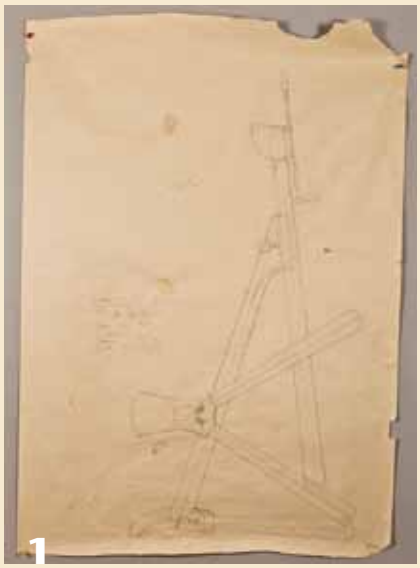
Art Carpenter showed me how to design within my abilities and how to make things in the most straightforward way. Stuart Welch taught me about reasoning through a design and set me the task of

The small lamp I made in 1984 provided the inspiration for changes to my bent-lamination music stand, which I have been making since 1989. I made the turned-stand prototype in 2011.

designing lighting. Art, a self-taught woodturner, led me to design around the lathe, which is the simplest and most direct way to make and join forms.

Their combined teaching inspired a small bedside lamp. With influences from Gyro Gearloose, the frazzled genius in Donald Duck cartoons, and "Little Helper," Gyro's tiny robot assistant with a lightbulb for a head, I had my concept. What could be simpler than drilling a few holes, turning three pieces, and fitting everything together with a few drops of glue? This directness appealed to me when I began searching for a new music stand design. Not only did I want a break from a design I had been making for more than twenty years, I also wanted to try to trim the costs. The 1/16"- (1.6 mm-) thick veneer I use to make the laminations is expensive as is the West Epoxy that holds the laminations together.

I have fewer a-ha moments now and am more likely to look at something I have used before and gently nudge it into a new context. That is exactly what I did with the music stand. I decided to keep the footprint of the Fiddlehead stand but replace the bent laminations with turned parts—larger versions of the pieces I used in that early lamp. I also gave the stem less rake to help make the stand more stable, especially when the stem is extended all the way.


1

◀ A full-size drawing—before turning—is a necessity.


2

The base block adds enough material to hold hanger bolts and screws for assembly.

Evaluating the new design

When I begin a project I draw a full-scale plan first (*Photo 1*). I can see the relationship among the elements and calculate angles for the joinery. It takes a few hours to make a drawing, but it is better than flying blind and coming up with a piece I do not like, or that does not work.

Once I had the first new stand nearly finished, I realized it would only be an intermediate step. In all, I made three prototypes of the first version, working out details of appearance and practicality before I found a design that was both workable and attractive.

I live in a remote area, so my production pieces have to be shippable. The Fiddlehead stand knocks down to fit in a box that can be shipped anywhere on the continent for less than forty dollars. Setscrews with a decorative wooden head hold the parts together. The first turned stands, however, were stuck in a fully assembled form. The 2¼" (57 mm) stock I used for the upright was not beefy enough for the hanger bolts and threaded inserts I used so the stand could be dismantled. My solution: Add a base block to connect the vertical member and the two feet. The wood-screw end of the ▶


3

When roughing out the base block, I tape offcuts back in place to restore the lines I removed on the first cut.


4

Everything I need to turn straight tapers and fit tenons: sanding blocks, spindle gouge, spindle-roughing gouge, parting tool, and square-nose scraper.


5

A long, shopmade toolrest makes the turning easier and more efficient.

A piece of waste screwed to the vertical member helps balance it on the lathe.

My drill-press jig tilts the base block in two planes for drilling the mortises.

Paste wax will protect threads and other surfaces from being epoxied in place.

I rough out the base block with an angle grinder.

To refine the shape, I use a spokeshave.

hanger bolt threads into a leg; the bolt end fits into a threaded insert that is epoxied into the mortise in the base block (*Photo 2*).

The carved base block allowed me to move the joining point forward. With this adjustment I could also shorten the feet, which I felt were too spindly. I could spread the back end of the footprint slightly, adding to the stand's stability.

Carved embellishments are a big part of my woodworking style. The base block would open up a lot of carving possibilities, or so I thought. In the end, the only embellishment I added was a simple Maloof-style detail on the top of the vertical.

Making the rack stem more vertical solved the stability problem, but the raked stem was sexier. So I compromised, giving the stem more rake than the prototype, but less than on the Fiddlehead stand. I also designed the rack to tilt, a feature my customers often request.

Moving into production

I rough out the base block and the top end of the vertical member on the bandsaw, then move to the lathe to begin turning components (*Photo 3*).

I turn the long tapers with a ¾" (20 mm) spindle-roughing gouge, a ½" (13 mm) spindle gouge, a parting tool, and a square-nosed scraper (*Photo 4*). With a long shopmade toolrest I can easily make long, smooth cuts; it also saves time because I never have to stop to adjust it (*Photo 5*). I do the final sanding of the tapers with blocks made from old pieces of ceiling tile cut to fit one-third sheet of abrasive paper; I also use one-sixth-sheet blocks to fit curves. The unfinished side of the tile has just a bit of give and lets the grits cut better than the painted side does.

To make the feet, I first drill the hole for the hanger bolt. I mount a Jacobs chuck in the headstock and use the tailstock to push the workpiece into the bit. Then I change the centers and reverse the workpiece. I use a cup center in the headstock and a cone center in the tailstock. The cone centers itself in the hanger-bolt hole and the opposite end self-centers in the cup. This method guarantees that I can recenter the piece no matter how many times I take it off to check the fit.

I cut the tenons on the feet to within 1/32" (0.8 mm) of final size, using Galbert calipers to check the diameter. Then I sand them to their final size. Because the foot has to screw in and out of the base block easily, the tenons do not fit their mortises squeaky tight. The foot gains its rigidity when the tenon jams solidly against the bottom of the mortise. To make that happen, I turn a slight concavity into the end of the tenon.

I round the ends of the feet with a spindle gouge, cutting almost all the way through. Once off the lathe, all it takes is a quick cut with a handsaw and a bit of sanding to leave the foot completely clean.

I shape the vertical member by first roughing out the head on the bandsaw, then turning the shaft round (*Photo 6*). To help balance the piece on the lathe, I screw an offcut from the bandsawing onto the head.

I built a set of drill-press jigs to drill the compound-angle mortises and the holes for the threaded inserts in the base block (*Photo 7*). Even with the jigs, however, the two holes are not concentric. Somehow, the drill chuck moves the center slightly when I change bits. I solved that problem by drilling the holes a bit oversized and casting the inserts into the hole in epoxy. I thread the insert onto the hanger bolt, then push the leg into position to center the insert in its bed of epoxy. A liberal coat of paste wax on threads and anything else I don't want permanently glued up is a necessity (*Photo 8*). Also, I always leave about 1/8" (3 mm) of space between the end of the tenon and the insert to allow for glue overage.

Tilt-lock pins can be made in pairs, first drilling curves for finger-holds, then finishing on the lathe.

I epoxy cap screws into predrilled cubes to make setscrews for the height adjustment.

I use the lathe to turn, shape, and sand the setscrews.

For the final shaping of the base block and vertical post, I begin with an angle grinder (*Photo 9*). I like the Saburr disc for large curves, followed by burrs in a pneumatic die grinder. Rasps eliminate most of the warbles in the curves; a spokeshave and hand scraper eliminate the worst of the rasp marks (*Photo 10*). I go back to the die grinder with a rotary sanding tool to further fair the curves, then sand with ceiling tile blocks to eliminate the facets left by the rotary tools.

The music stand uses a setscrew with a large wooden head to set the height adjustment and a pin like a violin tuning peg to hold the angle of the music rack. I rough out both on the drill press, using carefully placed holes to shape curves for finger-holds (*Photos 11 and 12*). For the tilt-lock pin, I make them in pairs, refining the shape on the lathe and sanding them smooth. For the setscrew, I epoxy a steel screw into the head, then chuck the screw into a faceplate to finish shaping and sanding it on the lathe (*Photo 13*).

Ongoing evolution

In general, I think the key to good design is to keep your eyes open and look at how others have solved problems. A solution for a different problem may suggest one for your project. Every time I think I have come up with an original idea in woodworking, I find that someone else thought of it a hundred years ago. Most of my a-ha moments are inspired by someone else's solution. I am not afraid to borrow from someone like Sam Maloof, but I do take pride in giving the solution a unique twist. The trick is to recognize the solution when I see it. These solutions will almost always be simple and elegant—so straightforward and obvious, we wonder why we couldn't think of them on our own.

Designs continue to evolve as I find better, more elegant solutions. I recently acquired some 3"- (76 mm-) thick Western maple, which I used to make a one-off music stand. The thicker stock gave me greater freedom in the forms I could create. That started me thinking about a new set of problems and solutions. For instance, I think this stock will be thick enough to accommodate hanger bolts, so I can beef up the spindly feet to make a knockdown version without the base block. If I do that, how will I drill the compound angles for the mortises? Perhaps the solution is to modify what I worked on in the past. And so it goes. ■

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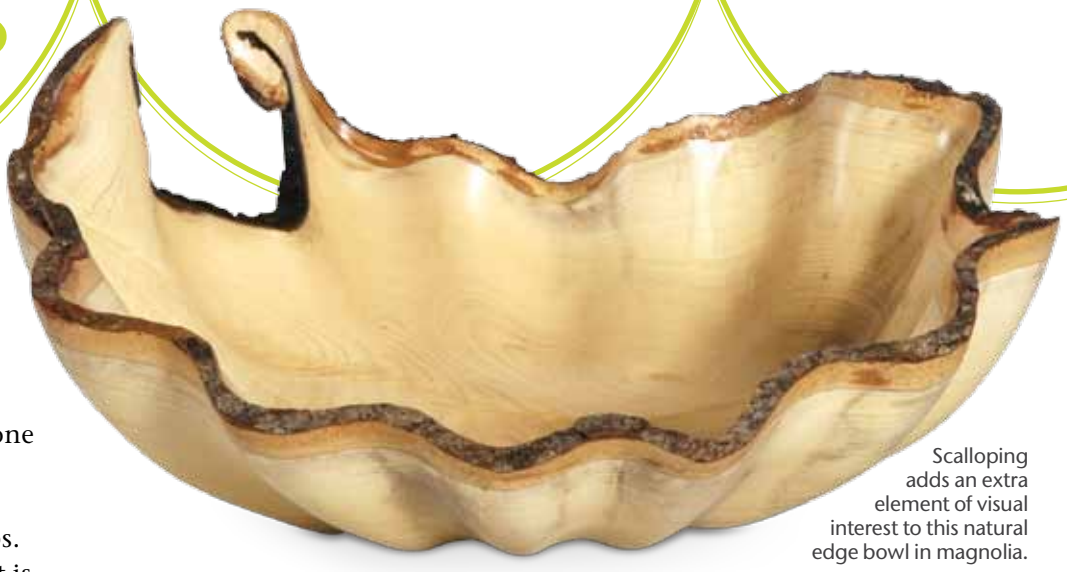
The design continues to evolve. This one-off stand, using thicker material, is the next step toward another production version.

Scallop-Edge Bowls

Richard Morris



Scalloping adds an extra element of visual interest to this natural edge bowl in magnolia.

There are many ways to add extra artistic flair to your turnings: carving, texturing, burning, and coloring. But one embellishment stands above the rest: rippling the inside and outside with smooth, carved scallops. Scalloping looks complicated but is actually quite simple. It works with all types of bowls, vases, and platters. They can be solid wood, segmented, or even natural-edge pieces. And while the technique doesn't require skill with carving chisels, it does entail the careful use of air-powered grinding burrs and sanding drums to carve a series of flutes. Sanding and smoothing the wood between the scallops ensures they are uniform. Here's what you need to know to get started.

Use this table to find the number of flutes that will fit around fourteen different bowl diameters, using two sizes of grinding burr. To calculate the number of flutes, first find the bowl circumference (3.14 × diameter), then divide the circumference by the diameter of the burr added to the wall thickness desired. Round up the answer to the next whole number. Numbers are in inches.

Diameter	Circumference	1" burr, ¼" wall	2" burr, ⅜" wall
8	25.12	20	11
9	28.26	23	12
10	31.4	25	13
11	34.54	28	15
12	37.38	30	16
13	40.82	33	17
14	43.96	35	19
15	47.1	38	20
16	50.24	40	21
17	53.38	43	22
18	56.52	45	24
19	59.66	48	25
20	62.8	50	26
24	75.36	60	32

Table 1.

Lay out and mark the flutes

First, decide on the finished appearance of the bowl. Measure its diameter and circumference, then use *Table 1* to find the optimum final wall thickness and the number of flutes. The segmented bowl shown in the photos has a diameter of 18" (46 cm) and a circumference of about 56½" (143.5 cm). Given those dimensions, I can space twenty-four 2" (51 mm) flutes around the rim, with a finished wall thickness of ⅜" (10 mm). That's perfect for my lathe, which has a twenty-four–position indexing wheel. If your design is not compatible with a twenty-four–position indexing head, you will need to use an add-on wheel, some of which have as many as 120 stops.

When you rough-turn the bowl, leave the wall equal to half the flute

Make a table and sled

The table has a 1" (25 mm) post welded to a 4"- (100 mm-) diameter disk of ¼" (6 mm) plate steel. Screw a piece of ¾" (19 mm) plywood to the steel. The plywood can be cut to the shape of the bowl.

The sled can be wood or UHMW polyethylene. Begin with a 3"- (75 mm-) square piece of material 6" (150 mm) long. Drill a 2" (51 mm) hole through the center lengthwise. Cut the piece in half on the bandsaw, which yields two sleds. Secure the air grinder in one sled with straps. Attach a pencil to another piece with a V groove in it.

diameter plus the rough wall thickness. For the segmented bowl, the rough wall thickness is 1 7/16" (35 mm), which allows for sanding to the final ⅜" (10 mm) thickness. Also, make the wall thinner toward the bottom of the bowl to ensure that the wall remains uniform even as the scallops become shallower and narrower. The bottom of the bowl shown is 15/16" (24 mm) *(Photo 1)*.

The best way to lay out guidelines for carving and to have a stable base for the grinding tools is to make a table that takes the place of the toolrest and a sled for the grinder *(see sidebar)*. Tailor the sled and table to your lathe and the size of the bowl. Just be sure the table is long enough to support the sled for the entire length of the bowl, and that the centerline of the grinder and pencil point align with the centerline of the lathe *(Photo 2)*.

Lock the indexing wheel in place. Draw a line on the outside of the bowl and mark the rim. Rotate the bowl to the next indexing position and repeat the marking *(Photo 3)*. Continue all the way around the bowl.

Now, make sure you have enough room to carve the flutes. Mark two lines on the rim: the first 1" (25 mm) in from the outside; the second, 1" (25 mm) from the inside. Later, these will act as guides for the carving. Next, draw a curve to represent the carving burr. You can cut a piece of card stock to size. For a 2" (51 mm) scallop, I trace around a precut sanding disk. Position the disk to represent a scallop on the outside of the bowl, centered between the indexing marks. Draw a second scallop on the inside of the bowl, and a third on the outside *(Photo 4)*. You do not have to work all the way around the rim. The three marked flutes are enough to show whether there will be enough wood left between the scallops.

Carve the outside flutes

Begin by setting up all the carving and safety equipment. I use a ¼" (6 mm) air grinder in the sled and a 2" (51 mm) spherical burr to carve the flute *(Photo 5)*. Your compressor should supply at least 10 cfm of air at 90 psi. You can use less, but the carving will take longer. To tame the dust and chips, I use both a dust collector and air filter, and I cover my nose and mouth with a mask. If I am working with exotic woods, I wear a respirator. I also wear safety glasses.

Lock the indexing wheel at the first stop and get the grinder set up in its sled. I use a gate valve to control the air supply to the grinder. This relieves me from holding a lever on the grinder while also holding down the sled. Wrap the air hose around your shoulders or hang it from the ceiling to keep it from rubbing the table and dragging the sled.

When the grinder comes up to speed, move it into the wood slowly to gain a feel for the reaction between grinder and wood. The ▸

Rough-turn the bowl with ample wall thickness. Mark the rim at indexing points for the flutes.

A shopmade table replaces the toolrest and supports a marking pencil and the grinder.

Mark flute locations on the side. The pencil must align with the lathe's axis.

Trace three flute shapes to be sure you have ample wood between scallops.

A 2" (51 cm) spherical burr will handle most of the carving.

Take light passes with the grinder, aiming for a smooth, even shape top to bottom.

Rotate the bowl, lock the indexing wheel, and carve the second flute.

spinning burr will want to ride up out of the flute, so hold down the sled as you move it back and forth. If you try to hog out too much wood too quickly, the grinder will probably stall, forcing you to start over. When you get close to the desired depth, begin measuring the wall thickness with calipers. Maintain an even wall thickness to near the bottom of the flute. Carve until you reach the guideline on the rim.

Measure the wall thickness often to avoid removing too much wood. You will not be able to carve all the way to the bottom because the faceplate or chuck will be in the way. Just get close; you'll finish the outside flutes when you reverse-chuck the bowl to finish the bottom. As you get close to the final rough wall thickness, make the last few passes from bottom to top in a continuous motion. This will ensure a smooth flute and reduce sanding tremendously *(Photo 6)*.

Redgum bowl with twenty-four scallops.

Position the table inside the bowl and carve one inside flute.

Check your work to be sure the wall thickness is correct.

Here is the bowl with all the flutes carved. More grinding and sanding knocks down the sharp edges to form scallops.

Rotate the bowl two indexing spots and lock it in place. Carve the second outside flute just as you did the first *(Photo 7)*.

Carve one inside flute

Rotate the table so it lines up with the inside of the bowl. Be sure the sled has enough room to move on the table and cover all of the inside flute. Trim the table if necessary. Mark a pencil line near the bottom of the bowl *(Photo 8)* so you know where to stop cutting the flutes.

Turn the bowl so that you carve the inside flute you marked earlier on the rim. Lock the indexing head in position and begin carving. This lets you double-check the initial measurement of wall thickness. It is better to find a problem now, not after you have invested time in the carving.

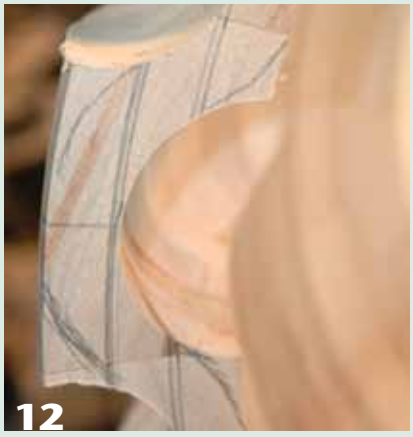
Examine the thickness between the three flutes to be sure you will have ample wood thickness in the finished piece *(Photo 9)*.

Finish the flutes

Move the table back to the outside of the bowl and adjust its height. Rotate the bowl two indexing positions and lock it in place. Check the position of the grinder by ensuring that the burr fits in between the guide marks on the rim. Carve the remaining outside flutes. Remember to carve every other pencil mark on the bowl, and check the work frequently to be sure nothing goes awry.

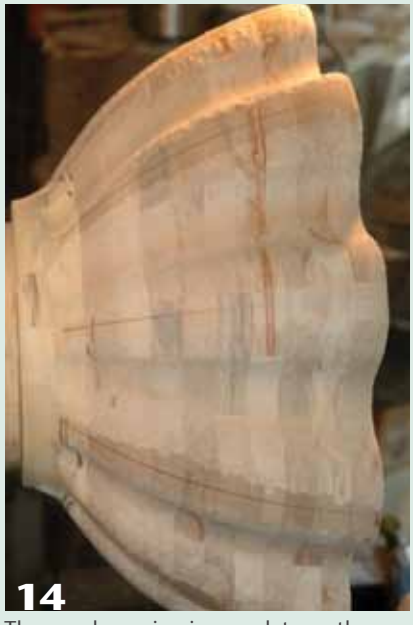
Reposition the table to the inside of the bowl. Using the guidelines on the rim and the guideline on the bottom, carve the inside flutes. Measure the wall thickness at the bottom of the flute to be sure it is uniform. The flute will become shallower and narrower toward the bottom, just like a slice of pie. Carve the remaining inside flutes *(Photo 10)*. ▶

Thickness near the rim must be uniform. Make any adjustments now.



Draw smooth curves on the rim to guide the next stages of shaping.

Begin shaping the scallops by freehand grinding with a small spherical burr.



The rough carving is complete on the outside scallops.

Carefully carve the first inside scallop, then check wall thickness again.

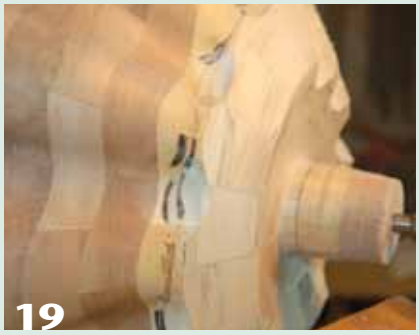
With all the rough carving complete, it is time for sanding.

17

Use a variety of powered sanding drums and disks.

18

The Guinevere sanding system cuts down on the time spent sanding.



19

A jam chuck and a special pin in the tailstock keep the bowl centered to reverse-turn the foot.

Scallop the flutes

The most critical part of the bowl is to have an even wall thickness in the top portion around the rim *(Photo 11)*. It must be even as far as you can reach down the rim with your finger and thumb. Make any adjustments to the flutes at this point.

Now comes the time-consuming part: carving and sanding the flutes into scallops.

First, draw some guidelines on the rim to help you carve the scallops properly. Pencil in smooth curves to show an even wall thickness and connect the outside and inside flutes *(Photo 12)*. Rather than draw the curves freehand, cut a cardboard disk to size; in the bowl shown in the photos, I used a disk with a diameter of 2⅞" (73 mm).

To begin carving the scallops, fit the air grinder with a ⅞" (22 mm) spherical carbide burr *(Photo 13)*. Lock the indexing wheel so the bowl will not rotate. Use the grinder freehand, not strapped into the sled. Begin carving the outside scallops, using the pencil lines as a guide. Use your finger and thumb as a gauge to determine wall thickness as you carve. Round the corners by following the pencil guides, by feel, and by eye.

I prefer to carve all the outside scallops before I work on the inside of the bowl.

The use of a banjo-mounted carving stand like the one made by Trent Bosch is helpful. This can actually position the piece in a more comfortable position to work on. I use the Packard stand in my work.

Carve both sides of a flute, measuring the wall thickness between your finger and thumb and with calipers as you carve. Carefully remove high spots and strive for smooth, even curves. You don't have to fully round the scallop shape. Leave the pencil guides in place *(Photo 14)*. Blend in the top of one flute with the bottom of the next one, creating a smooth, continuous curve around the bowl. Look at the bowl after you have finished all the rough carving. When satisfied with the results, move to the inside.

Carving the inside scallops must be done freehand with the grinder. Carve the sharp edges off on the first flute *(Photo 15)*. Leave enough wood to sand to the finished wall thickness. With the first flute carved into a scallop, use your finger and thumb and the calipers to ensure that the shape is right. Then move on to carve the remaining scallops *(Photo 16)*.

This camphor bowl is 25" (64 cm) in diameter, 9" (23 cm) deep, and has thirty flutes. I turned it in 2010.

Sand the bowl and reverse-turn it

Sanding is the longest and most tedious part of the process, but if done right, time can be diminished. Start with the coarsest grit necessary to remove grinder burr marks in a fairly short amount of time. I normally start with 120 grit. I do mostly power sanding using air tools *(Photo 17)*. I recently turned to the Guinevere sanding system, which uses round inflatable bulbs and sanding sleeves in an air grinder and air drill *(Photo 18)*. It has cut my sanding time in half. But use whatever power- or hand-sanding gear you have. After you have sanded away all the grinder marks, alternately sand the outside and inside, working up to 320 grit. As before, check the wall thickness frequently to be sure you do not sand away too much wood.

I use a jam chuck when I reverse-turn my bowls. It is a disk of wood that is 4" (102 mm) in diameter and has inch-thick closed-cell foam glued to it. I mount the disc into a chuck and use the tailstock to hold the bottom of the bowl. A centering guide on the faceplate that I used for the initial turning allows me to drill a hole in the bottom. A pin, sized to that hole, replaces the point in my revolving center. This perfectly centers the bottom of the bowl *(Photo 19)*.

Turn the bottom to remove any screw holes and shape it to your liking. Do not make the foot too small. I taper the bottom in at the center so the bowl sits only on the outside rim. Remember that the flutes will be carved to the bottom of the bowl, so be sure to maintain the contour of the side and that the bottom is wide enough to support the bowl.

Finish the carving and sanding

To finish carving the flutes to the bottom of the bowl, reinstall the table for the grinder sled. Use a ⅞" (22 mm) Saburr Tooth sphere bit in the grinder *(Photo 20)*. The smaller burr works better because the flutes narrow toward the bottom. Align the grinder and burr to the existing flutes. Lock the indexing wheel and begin carving. Maintain the contour so that the flute looks and feels continuous. When all the flutes are finished, remove the sled and table and freehand-carve the flutes into scallops. Maintain a smooth continuous flow to the curves, checking the shape with your fingers *(Photo 21)*.

To sand the bottom of the scallops, I use a 1" or 1½" (25 or 38 mm) sanding pad *(Photo 22)*. The round inflatable sanding bulb also works extremely well here. Sand all the way through 320 grit.

Reduce the nub on the bottom to approximately ½" (12 mm) diameter. Sand the bottom through 320 grit. Remove the bowl from the lathe and grind away the nub on the bottom, then sand that area.

Give the bowl a final check for tool and sanding marks, and sand them out as needed. My preferred finish is Mohawk precatalyzed lacquer from Klingspor. This process works with any size bowl or platter. ■

Richard Morris discovered a passion for creating things while taking every industrial arts class offered in high school. He has been working with wood for more than thirty-eight years and turning for eight years. For a list of tools and suppliers, visit Richard's website at richardmorrisart.com.

Use a small burr to finish the outside flutes, then smooth the curves.

Be sure the flutes are smooth and continuous all the way to the bottom of the bowl.

Use a small sanding pad to finish the scallops, then clean up the bottom of the bowl.

Learning to Avoid Spiral Catches

Joe Larese

The skew's long point is caught making a spiral catch. When the tool first enters the workpiece, its bevel does not yet have any support from the wood. The catch happens when the cutting edge tilts away from vertical.

Spiral catches also occur on cross-grained turnings. This can happen when the bowl gouge enters the wood with the top edges of its flute tilted off a vertical alignment.

I had almost completed a beautiful box. I decided to reverse and jam-chuck the base of the box to finish the bottom. A nice clean finish cut across the endgrain and the project would be complete. Aligning the tool's bevel to the cut I intended to make, I raised the handle, but the edge of the gouge took off in a totally different direction, leaving a nasty spiral scar on my box.

The main situation that makes a spiral catch likely is when the cutting edge enters the wood at an angle before bevel support is established.

Spiral catches are not exclusive to spindle turning. Another kind of spiral catch results when I lose control of a bowl gouge when making a hollowing cut from rim to bottom, or when cleaning up the foot of a bowl.

Most beginning woodturners suffer spiral catches and it takes practice and experience to develop methods that help avoid them. There are four distinct cuts that produce most runaway spiral catches. After listing them here, I'll offer exercises to help you understand what's going on, build skill, and avoid each type of spiral catch.

- Making a shoulder cut using the spindle gouge or the skew chisel. You'd use the same cut to finish the bottom of a box or a small endgrain bowl.
- Starting to cut a cove with the spindle gouge.
- Hollowing a crossgrain-wood turning using the bowl gouge.
- Finishing the exterior base of a bowl with the bowl gouge or spindle gouge.

Recognizing where and when catches can occur and taking steps to avoid them is key to being safe and enjoying your time at the lathe. There is always an element of risk when you apply a sharpened edge to a whirling block of wood—the material itself is beautiful but sometimes unpredictable. But there are few experiences like

The spiral catch


The threads of a wood screw show the helix angle.


With the edge of the skew positioned straight up and down, the skew stays in place.


Angling the edge to the right makes the skew skate to the right.

seeing a form materialize while you're using a tool that's guided entirely by your hands.

Understanding the spiral catch

The tool's initial penetration of the wood should immediately establish support for the tool's cutting edge. Once a tool's edge penetrates the wood's fibers, its bevel will rest against the just-cut surface and be supported. If the bevel is aligned correctly, the fresh surface will continue to support the bevel and the edge will continue to cut without incident. Hesitation at the beginning of a cut can be enough to cause a spiral catch. An edge or point that isn't sharp compounds the problem.

The usual advice with spindle work is to cut V grooves that then will support the bevel, and to plant your thumb or fingers on the toolrest to act as a stop. But this method didn't work well for me; I still suffered those unnerving spiral catches. I decided to try to understand why they happen, and the spiral shape of the catch was the best clue.

Machine bolts and wood screws work because the angled threads act as wedges. Generally, machine bolts have a small diameter and the fine threads disguise the angle, but if you look at a coarse-thread wood screw, or the wooden screw on an antique woodworking clamp, the angle is evident. Machinists refer to this angle as the helix angle (*Photo 1*). When making a bolt or screw, the machinist cuts the threads in a controlled, precise manner. I realized that when I had a spiral catch I, too, was making a screw, though minus the precision and control.

To find out more, I turned a cylinder about 2" (50 mm) in diameter. With the lathe running at a slow speed (between 200 and 400 rpm), I placed the shaft of a skew chisel at right angles to the workpiece, long point down. Keeping the cutting edge oriented straight up and down, I gently touched a section of the edge to the revolving wood. The skew stayed in place (*Photo 2*). However, when I rotated the handle clockwise with the cutting edge angled to the right, the skew skated to the right *(Photo 3*). When I rotated the handle counterclockwise with the cutting edge angled to the left, the skew moved to the left. When the cutting edge makes contact with the work on an angle other than 90°, it creates a helix angle relative to the point where it's supported on the toolrest, which leads the tool sideways in the same manner as would a machine screw. Cutting at that angle, combined with insufficient bevel support and inadequate tool control, results in the spiral catch.

The curved edge of a spindle gouge acts in the same way, but it is difficult to determine the center of the curve and keep it vertical. If you keep the flute closed, that is, turned completely to the right so that the top edges of the flute are aligned in a vertical line, you orient the curved edge in the same neutral position. From this position the very tip can begin the cut on the lathe centerline.

The spindle gouge and the skew chisel will both skate, but spiral catches generally do not occur with the spindle-roughing gouge because it is primarily used in a peeling orientation with the edge parallel to the wood fibers.

Shoulder cuts with the spindle gouge

The spindle gouge is capable of making fine finishing cuts on endgrain, as when cutting a shoulder on a spindle or the bottom of an endgrain box. Here's how to control this cut:

1. Mount a 2½"- (64 mm-) diameter blank about 6" (15 cm) long between centers. True the blank and use a parting tool to create a deep 90° shoulder that faces the tailstock.
2. Set the toolrest between ⅛" and ¼" (3 and 6 mm) below center height and align it with the lathe bed about ½" (13 mm) from the workpiece.
3. Using a ⅜" (10 mm) or ½" spindle gouge with a fingernail grind, place it on the toolrest and sight down and line up the angle of the bevel to match the squared surface of the blank. For this exercise, maintain this angle throughout the cut.
4. Rotate the tool so that the top edges of the flute line up vertically. The flute is considered closed (*Photo 4*).
5. Position the handle so that the tool is level with the floor. This will allow just the very tip of the gouge to start the cut. ▸

Shoulder cuts with spindle gouge

The start of a shoulder cut with the spindle gouge shows the bevel in line, the flute closed, and the gouge tip at the centerline of the work. Turner's view (*top*), tailstock view (*bottom*).

The midpoint of a shoulder cut with a spindle gouge shows the flute opened slightly and the lower portion of the cutting edge cutting higher than the centerline. Turner's view (*top*), tailstock view (*bottom*).

The start of a shoulder cut on the drive side with the spindle gouge shows the bevel in line, the flute closed, and the gouge tip at the centerline of the work. Turner's view.

6. Position the tip about 1/16" (1-2 mm) from the edge of the shoulder and place your thumb on the toolrest to act as a stop.
7. With the lathe running about 1,000 rpm, move the tool tip straight into the blank about 1/8" (3 mm). Once the cutting edge has penetrated the wood, the bevel will be supported (*Photo 5*). Continue to push and now slightly rotate the gouge to open the flute. This will allow the lower curved cutting edge of the gouge to cut and the flute will efficiently eject the shaving. Continue pushing the cutting edge into the work while maintaining light bevel contact with the freshly cut surface (*Photos 6, 7*). As the cutting edge approaches the intersection, slow down and rotate the flute back to its closed position.

As you continue the exercise, make sure to keep the tool level and with each cut, line up the angle of the bevel with the shoulder of the blank. Because there are only three movements (pushing forward and opening and closing the flute), this cut is relatively easy to master.

Once you've got it, try this: After the initial penetration and rotation, lower the handle slightly while pushing. As the cut approaches the intersection, slow down and raise the handle slightly so the tip meets the intersection. This involves synchronizing multiple movements (pushing forward, opening and closing the flute, raising and lowering the handle), but some turners find that moving the cutting edge through an arc leaves a better surface.

Practice the cut on the headstock side as well (*Photo 8*). Use the parting tool to remove wood and create a square shoulder that faces the drive side. Continue to make cuts in both orientations, aiming for a fine finishing cut that needs little or no sanding.

To practice the same cut on unsupported endgrain, as on the lid or base of a box, make a tenon and mount a 2½"- (64 mm-) diameter blank about 3" (8 cm) long into a 4-jaw chuck. True it and create a square shoulder with the parting tool. Orient the spindle gouge and practice making cuts on the unsupported end. Slow down at the end of the cut and position the cutting edge just below center to remove the nub. While it's important to have bevel support, too much pressure against the newly cut surface can cause vibration and chatter. As you gain confidence, change the angle as you push into the blank to create a concave area on the surface.

I use this cut (with slight variations) extensively when making boxes. After parting off the base, I use it to clean up the lid before hollowing. With the base remounted, I true it and use the cut to clean up the base's rim before hollowing. After the base has been hollowed, I usually reverse-chuck it to finish the box's bottom.

The cutting edge of the spindle gouge allows clearance because of the shape of the fingernail grind. It's important to open the flute slightly, but never wiggle the gouge or allow the flute to open past 45°.

Shoulder cuts with the skew chisel

The cutting edge of a skew chisel is created by the intersection of two bevels, so its cutting edge is generally more acute than that of a single-bevel spindle gouge. The skew's slicing action is capable of leaving a very fine surface. This exercise will help you take control of the cut.

1. Mount a 2½"- (64mm-) diameter blank about 6" (15 cm) long between centers and set the toolrest just below center height. True the blank and use a parting tool to create a square shoulder facing the tailstock.
2. Use a ¾" or 1" skew chisel that is sharp, and pay particular attention to the long point. If this point is not truly sharp, it cannot easily enter the wood when making a cut.

3. Place the flat of the long-point edge on the toolrest and sight down the bevel so the bevel is in line with the squared face of the blank. Maintain this angle relative to the toolrest throughout the cut (*Photo 9*).
4. Drop the handle so the long point will penetrate the wood above center. If you view the blank from the tailstock, imagine a clock face with the centerline being 9 o'clock. The point of the skew should penetrate the wood around 10 o'clock (*Photo 10*).
5. Position the long point about 1/16" (1-2 mm) *or less* from the end of the shoulder and place your thumb on the toolrest to act as a stop. Slightly rotate the tool clockwise a degree or two. When positioned in this way, the long point and the cutting edge of the skew are nearly vertical and the chance of a skate is greatly reduced (*Photo 11*). Important: when cutting the opposing shoulder facing the headstock, rotate the tool a degree or two counterclockwise.
6. With the lathe running about 1,000 rpm, lift the handle and make an arc with the long point into the blank. Gently lock your wrist so the cutting edge of the skew chisel doesn't wiggle. This hand motion is like placing the curved nozzle of a gasoline hose into your car's fuel tank (*Photo 12*).

Shoulder cuts with skew chisel

The start of a shoulder cut with the skew chisel shows the bevel in line and the tip entering the wood above the centerline. Turner's view (*left*), tailstock view (*right*).

The midpoint of a shoulder cut with a skew chisel shows the bevel in line and the long cutting point making an arc down toward center. Turner's view (*left*), tailstock view (*right*).

7. Continue to raise the handle and move the tool forward on the toolrest, maintaining the bevel angle. The long point should do the cutting and the endgrain shavings may pack together to form a disk-shaped offcut.
8. As the point approaches the intersection, slow down. After completing the cut, take the cutting edge away from the work and carefully withdraw it. I have experienced catches at this point simply by relaxing my wrist before withdrawing the skew chisel. The resulting wiggle moves the cutting edge onto the just-cut surface, resulting in a spectacular spiral.

To continue practicing with this cut, change the bevel angle slightly to make a gentle cone shape, then conversely to make a slight undercut. As with the spindle gouge exercise, create a shoulder by parting away waste on the drive side and practice making shoulder cuts that face the headstock, remembering to rotate the skew a degree or two counterclockwise.

The skew angle of the chisel results in a clearance angle when making a shoulder ▸

Nasty catches

A spiral catch can happen at the start of the cut before bevel support is established or when removing the cutting edge and it accidentally encounters part of the turning. If the cutting edge is angled when you lose tool control, a spiral catch is likely. Nasty spiral catches can happen in combination with other kinds of catches:

A dramatic catch is liable to occur if the tool's edge contacts the turning wood without toolrest support. The shaft slams violently against the toolrest and the edge is likely to carve a divot in the wood. There are few absolutes in the practice of woodturning, but here's one of them: ***Always anchor the tool to the toolrest before beginning any cut.***

A second type of nasty catch occurs when the tool's shaft has support at the toolrest, but the tool's edge engages too much material because the bevel wasn't allowed to contact the wood at the very start of the cut. Another absolute: ***Whenever possible, have the bevel rub the wood at the start of the cut.***

A third type of spectacular catch happens when some part of the tool's cutting edge makes accidental contact with a part of the workpiece that has a larger diameter. A classic example occurs when the wing of a large spindle-roughing gouge encounters the square portion of a table leg. The cut and support were properly centered, when suddenly an unsupported portion of the edge engages the pommel some sideways distance away. The tool twists and the wing slams onto the toolrest. A third absolute: ***Make sure the portion of the edge that is doing the cutting is receiving direct support from the toolrest.***

Coves


13


14

The start of a cove cut with the spindle gouge shows the bevel in line, the flute closed, and the tip at the centerline of the work. Hesitation at the start of this cut can cause the gouge to skate. Turner's view (*top*), tailstock view (*bottom*).


15

The midpoint of a cove cut with the spindle gouge shows the flute opened slightly and the lower portion of the cutting edge cutting higher than the centerline. Turner's view.


16

The bevel receives immediate support when the bowl gouge enters the wood with the flute in the closed position.

cut with the long point. The clearance angle is only a few degrees though, and the straight edge doesn't allow much room for error. Additionally, the cut must be very thin because the shavings do not have the benefit of being broken, as they are by the flute of a spindle gouge. Nevertheless, the skew's acute angle is capable of slicing the wood to a really fine surface.

Cove cuts with the spindle gouge

Cutting a well-shaped cove takes a lot of practice. Coves are formed by a series of cuts with a spindle gouge. Experienced turners learn to position the gouge and sweep into the blank in a way that allows the bevel to get immediate support. If the cutting edge starts to cut before the bevel gets support, the gouge is liable to skate. The usual advice is to make preparation V cuts with a parting tool or skew chisel, and to use your thumb as a stop. Turners also should try making the initial entry using the very tip of the spindle gouge with the flute closed.

Here's a practice exercise.

1. Mount and true a 2"- (5 cm-) diameter blank about 12" (30 cm) long between centers. Mark pencil lines to indicate the edges of the cove.
2. Set the toolrest ⅛" below center height and align it with the lathe bed about ½" from the work.
3. Using a ⅜" spindle gouge with a fingernail grind, place it on the toolrest and position the cutting edge at the left-side pencil line.
4. Rotate the tool to the closed position with the top edges of the flute lined up vertically.
5. Position the handle so that the tool is level with the floor. This will allow just the very tip of the gouge to start the cut (*Photos 13, 14*).
6. With the lathe running about 1,000 rpm, move the tip about ⅛" into the blank. Once the cutting edge has penetrated the wood, the bevel will be supported. Continue to push and rotate the gouge to open the flute, while lowering the handle. Continue pushing the cutting edge into the work while maintaining light bevel contact with the freshly cut surface. Make the initial cut shallow and stop at the halfway point between the pencil marks. Make additional shallow cuts until the cove is deeper (*Photo 15*).
7. Position the cutting edge at the opposing pencil mark, align the bevel to the just-cut gently sloping shoulder, and make a similar cut to complete the shallow cove.

The cut is challenging because it involves four distinct movements: moving the tip forward into the blank, rotating the tool to open the flute, lowering the handle to allow the bevel to rub, and pivoting the tool so the cutting edge moves in an arc. With practice, the movements become coordinated into one smooth motion.

Hollowing with the bowl gouge

Similar techniques can be used to help avoid spiral catches when hollowing shallow platters and deep bowls. British woodturner Robert Chapman explains a tool control method to prevent skates in his book *Woodturning, A Fresh Approach*. He describes an exercise in which you lightly touch the curved cutting edge of a gouge to the face of a slow-turning blank. When the top edges of the flute are inclined to the right, the gouge skates to the right, and when inclined to the left, the gouge skates to the left. The angle of the cutting edge makes the tool travel across the face of the blank in the same manner that it moves across a cylinder when spindle turning. Here's an exercise to improve control of the bowl gouge:

1. Mount a 3" by 8" (8 by 20 cm) blank on a faceplate or into a 4-jaw chuck, run the lathe about 600 rpm, and true the edge.
2. Set the toolrest parallel with the blank and adjust the height so

the very tip of the gouge is on the centerline.

3. True the face. Drill a depth hole about 2" (5 cm) deep at the center.
4. Position the bowl gouge handle and shaft so it is level with the floor.
5. With the flute closed, (the top edges of the flute line up vertically) place the cutting edge on the face of the blank and align the bevel in the direction of cut (*Photo 16*).
6. Pivot the edge into the blank and open the flute slightly by rotating the gouge.
7. Continue successive cuts to complete the hollowing.

By ensuring that you start the hollowing cuts on the centerline of the blank and by keeping the flute closed, you'll greatly reduce the tendency to skate.

Finishing a bowl's base

Because of grain direction, many bowl turners prefer cutting from the center to the outer portion of a bowl's base with a pull cut, and at least part of that cut requires a scraping action that can leave a less than adequate surface. If a clean finish cut from the rim of the base to its center is desired, be sure to true the outer portion of the base before aligning the bevel. Use a light pull cut. The bevel can then rest on that trued surface (*Photo 17*) and you will have greatly reduced the chance of a skate up the bowl's wall. Despite that reduced risk, I always start the final cut with the flute closed and the cutting edge on the centerline. As the cut progresses, I rotate the tool to open the flute slightly (*Photo 18*). This cut is identical to the cut used on the base of an endgrain box. ■

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Bowl base

17

To finish the bottom of the bowl, first make a small flat where the bevel of the gouge can rest. Then start the clean finish cut with the flute closed.

18

As the cut progresses, rotate the tool to slightly open the flute.

Quick guide for avoiding catches

All catches start when you lose tool control. It's probably impossible to eliminate all catches, but you can minimize their frequency and severity. Here are a few guidelines.

Keep it sharp

A dull cutting edge or point on any tool will require more force, often resulting in loss of tool control. Sharpen often.

Maintain the toolrest

The toolrest supports the tool in your hands. Think of it as the interface between hand tool and machine. The tool needs to glide over the toolrest with a minimum of effort. File the toolrest to keep it smooth.

Watch out for different diameters

Whether you are working on the foot of a bowl or a handle of a mallet, the intersection of vastly different diameters is a place to be extra careful. A tool's cutting edge that straddles two different diameters is liable to catch.

Match the tool to the job

The long point of a skew chisel is the best tool for a V cut and a spindle gouge is ideal for cutting a cove. Generally it is best to use a large tool on a small turning, not vice versa.

Special care while using scrapers

In scraping and shear scraping, the bevel does not touch the wood and safe cutting takes place at the centerline on the exterior of a form and slightly above the centerline when working on the interior. Use only a portion of the cutting edge, and keep the edge trailing. Shear scraping presents less of the cutting edge than scraping, but take care to move the tool smoothly across the toolrest and take light cuts. Avoid using scrapers on flexible thin-walled bowls near the rim.

Practice cuts

With the lathe off, go through the motions before cutting a cove or a bead. Practice builds muscle memory, making the main event easier. Professional golfers and major league hitters practice regularly.

Maintain bevel contact

To develop confidence in controlling the cut, with the lathe running, keep the cutting edge clear of the surface while allowing just the bevel to touch the wood on a straight or slightly curved surface. Slowly engage the cutting edge to take a small shaving and then resume the safe position of just the bevel touching the wood. This is an excellent exercise for understanding how the bevel limits the cut and keeps it from running away.

Clearing the work

While helping a beginning woodturner, I noticed she removed the tool quickly while hollowing an endgrain box. It was a nervous response and a catch could easily have happened. Control includes safely clearing the cutting edge after making a cut.

Relax

Too firm a grip usually results in a more severe catch. Carl Ford III, a trusted friend and an excellent turner, gave me this advice, which I use when I challenge myself with a tricky cut: "Stop clenching your jaw or you'll bust a tooth."

Madcap Mushrooms

Roger Zimmermann

Mushrooms turned from tree branches are nothing new. Typically, mushrooms are made with the axis of the tree branch coinciding with the vertical axis of the stem of the mushroom, often with a thin band of bark left on the edge of the mushroom cap. The cap would display concentric rings from the tree's growth rings and the heart of the branch may contain some darkened heartwood.

Madcap mushrooms capture the often rough, gnarly, not-so-smooth, wild, woodlike appearance of bark imperfections. These mushrooms look like they have recently grown out of the soil, carrying in their caps a bit of earth, as if they had just pushed forth from some compost-laden ground. The stems, rather than having a uniform color or grain, exhibit a wealth of patterns, colors, and textures. Free-range madcap mushrooms are harvestable all year.

Orient the wood

Madcap mushrooms are made by rotating the axis of the branch 90° when making the saw cut and are formed from the overgrowth of knot scars or damage the tree has suffered at the hands of nature. The branch's growth rings appear in the stem instead of the cap and create ovals, ellipses, and interesting patterns.

When a secondary branch is broken off near the trunk of the main branch, the tree attempts to seal the wound by creating an overgrowth. The scar material often looks like the bark of the rest of the branch but usually does not completely imitate the original bark. It is rough, misshapen, incompletely sealed, and has holes or fissures. The rain and elements

penetrate the damaged area and before the tree can complete its healing, permanent damage has occurred. The wood becomes infected with disease, rot, insects, and discoloration. This damage percolates down the knot's grain and causes spalting, decay, and wormholes in the heart of the secondary branch formation. These bumps and protrusions are ideal for the caps of madcap mushrooms.

Trim and mount the wood

After the stock has been sawn from the branch, it needs to be trimmed at the base in order to be mounted onto the lathe. This can be done by gluing it to a waste block or using a 4-jaw chuck. I prefer the chuck because it requires very little time to shape the end of the stock in order to be gripped. I use the bandsaw to cut the base of what is to become the stem into a square that will mount into a chuck.

Align the cap so that it will be centered on the centerline axis of the lathe. If it doesn't line up perfectly, though, it doesn't matter—misalignment creates interesting shapes. The cap, however, should be centered enough so that when turned, the underside of the cap (the top of the mushroom's stem) will be cut cleanly all the way around. This will ensure that the stem appears to penetrate the cap rather than having a flat area, which looks unnatural.

Hints for turning

Use very sharp tools. Begin by cutting the base of the cap to the desired diameter at the top of the stem. Be careful—this area is the most likely to have suffered rot or water damage and may be soft, punky or even hollow. Proceed slowly and stop the lathe occasionally to assess the condition of the wood and whether to cut deeper.

Apply thin CA glue to any soft material or potential cracks to add strength and/or hardness to those potential weak areas. The cutting process is similar to cutting the body of a spinning top. Use a ⅜" or smaller spindle gouge with a fairly steep bevel angle (30° to 40°) to make the cut. Avoid the use of scrapers or scraping cuts, which could easily catch the endgrain and break the cap free of the stem.

After the diameter of the base of the cap (or the top of the stem) has been determined, thin the diameter of the stem, working toward the headstock. Work slowly and take fine cuts. Too much pressure with the tool on the wood could break the stem. *You are cutting cross-grain rather than long-grain and as such, the wood is not as strong.*

Shape the stem to your liking, but avoid straight lines. Curves are pleasing and natural looking.

I use a parting tool to delineate the bottom of the mushroom and cut just deep enough to mark where the end of the stem will be. That leaves enough wood available to refine the curvature for a pleasing shape at the end of the stem.

For the underside of the stem, create a slight concave surface so that the mushroom will stand upright when completed. You might need to wrap your fingers around the stem to offer support to prevent the stem from breaking off prematurely. Remove the nubbin left behind.

Finish

I like to use Formbys low-gloss tung oil. It penetrates well and leaves a natural-looking surface. The mushroom can be submerged in the finish or the finish dabbed on using a foam brush. Be sure to wipe the mushroom dry with a paper towel or rag when you are through applying finish.

Loaded into a bowl, these mushrooms look real! Or, create a free-standing arrangement of mushrooms, fill a glass jar, or build a crate, filled with shavings or excelsior and arrange mushrooms on top. I tell the recipients of these mushrooms that the madcap species of fungi must be soaked for a long time before use in cooking. Bon appétit! ■

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Richard Raffan
First bowl-turned Jan 1970

Richard Raffan

I don't feel the need to be different, but I would like to be good.

Terry Martin

There are few woodturners as well known as Richard Raffan. Over the decades, he has built his reputation through the simple and rapid turning of inexpensive objects for daily use, and then teaching others how to do it. Richard has been working as a self-employed turner since 1970, has been an outstanding demonstrator and teacher, and has produced more how-to books on turning than anyone else, so his ideas have stamped themselves on a worldwide generation of turners. In 2012, the Professional Outreach Program (POP) is recognizing Richard for his extensive contributions to the turning field. This Merit Award is also an acknowledgment that traditional turning should continue to be recognized and respected by the contemporary turning world.

The raw facts of Richard's life are interesting enough, but of equal interest is why he has remained true to his craft roots and why he struggles to hide his scorn for what he sees as fleeting fancies. I don't know anyone else who would be confident enough to say, as Richard recently did, "I'm sure my simple bowls will long survive much of the turned wood art in big collections." So where did this strength of conviction come from? Not surprisingly, it is partly a result of the influence of his family, but it is also because of the key personalities he met during his early development.

Origins

Richard was born in 1943 in Devon, England, into a family that valued tradition. "I was brought up in a house full of antiques and Georgian silver on the table," he says. He started a basic course at Exeter College of Art in 1962, but dropped out after two years. It may be more significant that he then worked for a company that sold Scandinavian furniture and manufactured household wares, an early influence that helped shape his personal philosophy. "I learned that you can make something both very well and very quickly without compromising quality," he remarked. This work was followed by five years in the wine trade, which he says taught him about promotion and sales, key ingredients in his career as a turner.

Richard became bored with selling wine and when he was discussing his future with his sister, she mentioned a woodturner who lived near where she apprenticed as a potter. When she suggested he try woodturning, Richard was immediately interested, "I just thought it sounded right. It was a genuine leap into the unknown, but I reckoned I'd know if I was going to enjoy it in a few days or weeks, and if I would be any good in a couple of months. I took to it like a duck to water. I was also attracted by the relatively low cost of getting started and by the ease and speed with which a finished ▸

Ash bowl, 1970, 2½" × 12" (65 mm × 305 mm)

My first bowl, used by my mother for 25 years, washed thousands of times, rarely oiled. Great patina—pity the shape isn't better. —RR

Crumpled nut bowl, 1987, Tasmanian stringybark burl, 3" × 5½" (80 mm × 140 mm)

Citadel boxes, 1992, Jarrah, 9" × 4½" (230 mm × 115 mm) (tallest)

Verdigris Pipes, 2006, Elm, verdigris, acrylic (*inside*), 2½" (65 mm)

I like the element of fraud with my verdigris work; it's difficult to discern the material at first glance, or even when holding the objects. —RR

Photo: Richard Raffan

and satisfying object can be produced on a lathe and then sold." He ended up paying for training with Rendall Crang in a small country workshop. Richard often mentions how many pieces he has made in production work and it is not hard to see how those early days with Crang were important. "He was never happier than when he had a run of work," Richard explains. "For one run of 100 salad bowls he said, 'Something you can get your teeth into lad! Don't have to think too much!'"

Building a career

Richard soon decided to strike out on his own, but it was not easy. "There was practically no hobby turning and art turning was non-existent," he explains. "It was difficult to find tools and you even had to wait months to get a decent lathe." He started out making small items such as bowls, lamps, and pestles and mortars. "I put them all in the back of the car and drove around looking for craft shops. I only had to do that twice and afterwards people came to me. Soon I was nonstop making things like sugar bowls with scoops. It was exceedingly boring, but very good practice." A gallery owner saw one of Richard's sugar scoops in his sister's kitchen and ordered four dozen. Richard always enjoys pointing out that since then he has made "at least twenty-two thousand sugar scoops." By 1975, Richard was well established, providing bowls, scoops, and boxes to kitchen shops and finer pieces to galleries. These were important years when he honed his production skills and when his sense of identity as a production turner developed.

Powerful influences

As a potter, Richard's sister was strongly influenced by the Arts and Craft movement, and Richard also came under its spell, as he explains: "I was very influenced by well-known potters. At a potters' camp in the seventies I was branding my work with a stamp made by David Postern, a well-known jeweler, when David Leach [son of the legendary Bernard Leach] walked past shaking his head. 'No Richard,' he said, 'your work doesn't need that sort of thing.' When a god of the crafts commented, I tended to listen. These potters sold heaps of stoneware to kitchen shops and had solo exhibitions in galleries. I started turning surrounded by those people, so as far as I was concerned that was what you did running a craft business."

Exhibitions

Since 1971, Raffan has taken part in around 150 group and solo exhibitions around the world, beginning with his first show at Chagford Galleries

in Devon in 1971. In 1973, Richard took part in two significant exhibitions that started his rise to turning fame. His work was shown in *The Craftsman's Art* at the Victoria & Albert Museum and then in *Domestic Objects* at the British Crafts Centre, both in London. Richard explains why these two shows were so important: "I was the only turner represented in *The Craftsman's Art* exhibition and it was a key boost to my career. Selling through the British Crafts Centre in Earlham Street and also their gallery in the V&A couldn't have given anyone better exposure. After that I was invited to just about all the big craft exhibitions put on in Britain and a few in Europe. I was definitely in the right place at the right time and would hate to try to get established today." Over the coming years there were other shows that marked significant stages in Richard's career, such as his first show in Australia in Mittagong, New South Wales, in 1977; a European tour under the auspices of the World Crafts Council in 1979; and his first U.S. Instant Gallery at an early LeCoff symposium in Philadelphia in 1981.

A unique role

Around the time Richard started turning, all across the western world trade turners were laying down their tools. Richard's entry into turning coincided with this decline of turning as a trade, but it was just in time for him to learn from a turner who still had the old skills. Also, as the last generation of production hand turners gave up the trade, Richard was able to step into his role as guardian of a traditional craft and pass on these skills to the rapidly growing numbers of hobbyists. He had a foot in both camps and developed a split-personality career as a solitary turner working in a small workshop, and as a public personality performing for hundreds of hobby turners every year. For most of his life he has proudly described himself as a production turner, even while he was traveling the world demonstrating and writing books for hobbyists.

First demonstration

Richard's explanation of how he began demonstrating opens with a typically blunt assessment of other people's work: "In 1980 I was invited to a show organized by the Worshipful Company of Turners in London. I had never seen so much appalling work in one place. I talked with John Makepeace, founder of the influential Parnham Wood School in Britain, and he organized a symposium to counteract all this bad work." Makepeace invited two innovators in the turning world, Stephen Hogbin and David Ellsworth, as well as Paul Smith, curator at the Metropolitan Museum in New York. Held in June 1981, it was the first international turning symposium in Britain and Richard did his first major presentation there. He says, "I had never spoken in front of a crowd, but to my relief I managed to pull it off."

Ellsworth told Richard about Albert LeCoff's symposiums in Philadelphia and he and Ray Key received grants from the British Arts Council to travel to the U.S. for the last of these ▸

Spillikins, 1978, Maple, laburnum, 8" × 2½" (203 mm × 64 mm)

One of about 200 sets. I made the first in 1978 in response to a commission from John Makepeace when I was a visiting tutor at his Parnham Wood School. The brief was something "to wow them technically." —RR

Red Verdigris Quintet, 2012, Manchurian pear, verdigris, acrylic, 3½" × 3⅓" (90 mm × 85 mm) (tallest)

symposiums in 1981. Again, he is not afraid to make a brusque observation, "There was nobody there who knew how to use a gouge. Dale Nish had one, but he wasn't very good with it." So after inquiries about how to use a gouge, Richard agreed to demonstrate. "David Ellsworth was sitting right in front of me with his legs sprawled. First thing, I had a catch and the bowl shot off straight into his crotch!" Despite this shaky start, Richard says the symposium was a great introduction to the American scene. It was also important that he met John Kelsey, editor of *Fine Woodworking*, who was to foster Richard's later development as a writer.

Rediscovering Australia

Richard migrated to Australia in 1982, but he has a much longer pedigree that fully entitles him to claim to be Australian. His whole family had migrated to Australia in 1947, as he describes, "I spent the crucial years from four to seven in Sydney. Later in England I painted pictures with clear blue skies, but I was told such skies didn't exist. I suppose I believed that until I saw it again for myself. Later I discovered I had seemingly endless relations in and around Sydney, all going back to my great grandfather."

When Richard revisited Australia in 1975 he was surprised to learn that his reputation had preceded him and he was quickly invited to take up a residency in Mittagong, where he spent three months in 1977. "I enjoyed working there," he says. "The Tasmanian woods they gave me to work with were very plain compared with the figured woods I'd worked in Britain, so I had to concentrate totally on form without distractions of the grain. Several of the bowls and boxes I made there were purchased by the National Gallery of Australia for their permanent collection."

In 1986, Richard demonstrated at the annual symposium in Provo, Utah, where he has remained a perennial favorite. He is happy to give credit to Dale Nish, the initial organizer of those events, for much of his subsequent success in the U.S.: "Dale really put me on the map." Utah was a significant destination because it linked Raffan's two distant home countries, Australia and Britain, enabling him to take extended demonstration and teaching tours in all three countries, a relentless schedule that paid well and cemented his dual identity.

Collections and collectors

Although Richard's work is held in significant museums, including

the British Crafts Council, the New Parliament House and National Gallery Collections in Canberra, Australia, the Power House Museum in Sydney, and the Victorian State Craft Collection in Melbourne, collectors rarely purchase his work. In a story he wrote years ago, Richard offered this explanation, "Functionality is generally anathema to collectors, so the hollow vessel has been a favorite vehicle of expression for those aiming at that particular market. Following the lead of David Ellsworth, there have been a bewildering number of variations on this fairly conventional theme already well explored by potters and glass blowers over several thousand years." His disdain is even clearer when he writes, "Although universally plagiarized, the turned hollow vessel has become a distinctly American art form with seemingly infinite variations made by every man and his dog easily found in galleries across the USA." There may be some truth to this, but the choice of language is revealing, especially when we consider that bowls, a form that Richard has devoted much of his working life to, are also usually plagiarized versions of conventional forms.

Strong opinions

Richard respects some contemporary turners, but he makes it clear that he dislikes a lot of contemporary work. In his own words, "I am amazed that some of it is taken so seriously. People seem to think that being different somehow makes a piece art. Some are desperate to be taken seriously as artists and known internationally, and galleries encourage them. It's all too pretentious for me. Many of these turnings are collectible, but realistically they belong in a museum of technological how-on-earth-was-*that*-made wonders rather than a museum of fine art. I suspect most will end up buried in store rooms." These are strong judgments. It's true that the two styles of work have a common link—the lathe—but that seems to have blinded Richard to the fact they are two very different things that cannot be judged by the same criteria.

Wavy bowls, 2012, 3" × 7" (75 mm × 180 mm) (largest)

I have turned a couple of thousand very thin bowls using green wood. By aligning the grain in a blank, the warping is predictable. This pistachio is the best wood I've ever used for green turning. —RR

Looking back

Almost certainly Raffan never expected to become a famous person when he began as a woodturner. For many years his days were filled with production work interspersed with occasional shows, but as the woodturning revival developed, he was well placed to become a must-have demonstrator at turning events. The fact that it was unexpected didn't mean he was reluctant, and he embraced the life of an itinerant demonstrator and relished the attention. Gradually the turning world has been almost overwhelmed by demonstrators and competition has grown for valued slots at clubs and events. To distinguish themselves, many of the new demonstrators have relied on novelty. Also, many of the new demonstrators are not professional turners and are happy to just earn enough to help fund their lifestyle. All of this worries Richard, ▶

Square plate, 1970, Pin oak, 6½" × 7¼" (165 mm × 184 mm)

Huon pine boxes, 2012, 6¾" × 3¾" (175 mm × 95 mm) (tallest)

It's humbling to know you can count nearly 500 annular rings on the base of each box. —RR

Rocking Boat, 2012, Claret ash, verdigris, acrylic, cotton, found objects, 6" × 5" × 3" (150 mm × 130 mm × 80 mm)

Mostly turned, this is my entry for the 2012 POP exhibit, "Beyond Containment." —RR

who has remained true to his early convictions. He says that "the essential traditional turning skills are being lost." This is a surprising judgment in light of his comment that gouge use was poor when he first visited the U.S. There are many turners in the U.S. today who are very good with the gouge, and maybe he can take some of the credit for that.

"Having money in the bank beats being famous."

When he assesses his career, Richard Raffan always stresses the production work. He seems to believe the respect he earned as a production turner outweighs his reputation as a demonstrator and writer. He confirms this impression with these words: "Many people have no idea that I was well established as a craft name by the mid-seventies and the fame that came with the books and videos was on top of all that. As a turner with no other means of earning a living, I initially took on everything that came along, preferring to sell the bowls and scoops, but willing to do runs of spindles and turn bits for antique restorations. However, after a couple of years I was able to concentrate on work that sold to galleries and retailers who paid on time. Having money in the bank beats being famous every time. As late as 1981, when I had a good reputation, I had a regular order for 2-inch-diameter plinths to go under porcelain figurines. It was stuff most artistic turners wouldn't and maybe couldn't do, but it was very good money. My bowls did attract a lot of attention in Britain in the early seventies, but scoops were my main small item and I sold at least fifty a week throughout the seventies. Of the 26,000 or so bowls and platters I've turned, fewer than 3,600 were 12 inches in diameter and above. Half were between 8 inches and 12 inches. About 3,000 bowls were less than 3 inches. I like to think my work was well designed, conservative, traditionally based, and what the market demanded."

I am sure Richard could have done very well if he had stayed in his original workshop, but it was never going to happen. Despite his frequent protestations about being a nervous performer, I have never met a turner who seems to enjoy the recognition as much as Richard. Once he got a taste of fame, there was no going back—and there is nothing wrong with that.

Evolving work

Richard's move to Australia was doubly significant because it not only changed the materials he was working with, but it also meant a new market: "In the eighties after I moved to Australia I mostly supplied the tourist market that demanded much heavier and less practical bowls in red woods. I initially made thicker jarrah burl bowls to add variety to the forms in my book *Turned Bowl Design* and these were sold through my usual retailers in Sydney. Before that most bowls on

Manchurian pear bowl, 2009, 3½" × 7" (90 mm × 180 mm)

Some bowls seem to be just right, and I believe this is one. —RR

Food bowl, 2006, Elm, anti-rust paint, 3" × 11" (75 mm × 280 mm)

Photo: Richard Raffan

the market were thin and of relatively plain woods like rosewood mahogany or Huon pine. My theory is that the thicker bowls became popular because they were easier to pack and fly home with. Although I've sold fewer than 250 large platters and trays, they did encourage other turners into the craft as professionals."

Despite his respect for traditional values, Richard has always seen himself as an innovator, albeit at a more incremental rate than is common these days, "I've always experimented with color and texture, but few of those experimental pieces left the workshop until the Citadel Series of boxes and the groups of colored bowls, pots, and tubes. That was about ten years ago after I retired from production work. I am mainly interested in simple forms and refining those remains the challenge for me. I never did like shiny surfaces, and they aren't really suited to utilitarian bowls. I want pieces to be used and if they're too glossy, people are afraid they'll spoil the finish and won't use them."

Perhaps unlike many traditional turners, Richard has always felt he is a technical innovator. "I certainly promote the ways I work at the lathe as they've worked so well for me, but if I see a better technique or way of doing things, I use it. When I revised my book *Turning Wood*, my approach had altered so much over fifteen years that I needed new photos for almost every technique. I still get major insights watching people like Mike Mahoney, Dave Schweitzer, or Les Thorn."

Wavy bowl, 2004, Oak,
5" × 18¾" (130 mm × 480 mm)
Photo: Richard Raffan

Richard has always had a strong sense of the legacy he will leave, as he explains, "I'm interested in making stuff that will survive generations. I have tools with tradesmen's names stamped on them that I bought at auctions and junk shops. I've no idea who these people were, only that they used these tools of trade, and now I am using them. I hope someone will continue to use them after me, because keeping traditions going does appeal. I also like the idea of someone decades from now knowing that an individual made the bowl they enjoy using."

Well-deserved award

When I heard that Richard was being given this award, my first reaction was to wonder why it took so long. My respect for Richard's achievements is very deep and I have met turners all over the world, even as far away as Japan, who acknowledge his influence. I am sure he deserves the status of a respected elder in the turning world, but I also believe that respect would be even deeper if only he could temper his disdain for other ways of seeing turning. Somehow, though, I don't think he is going to hold back on his opinions! Congratulations, Richard. ■

Terry Martin is a wood artist, writer, and curator who lives and works in Brisbane, Australia.

Photos by Tib Shaw unless otherwise noted.

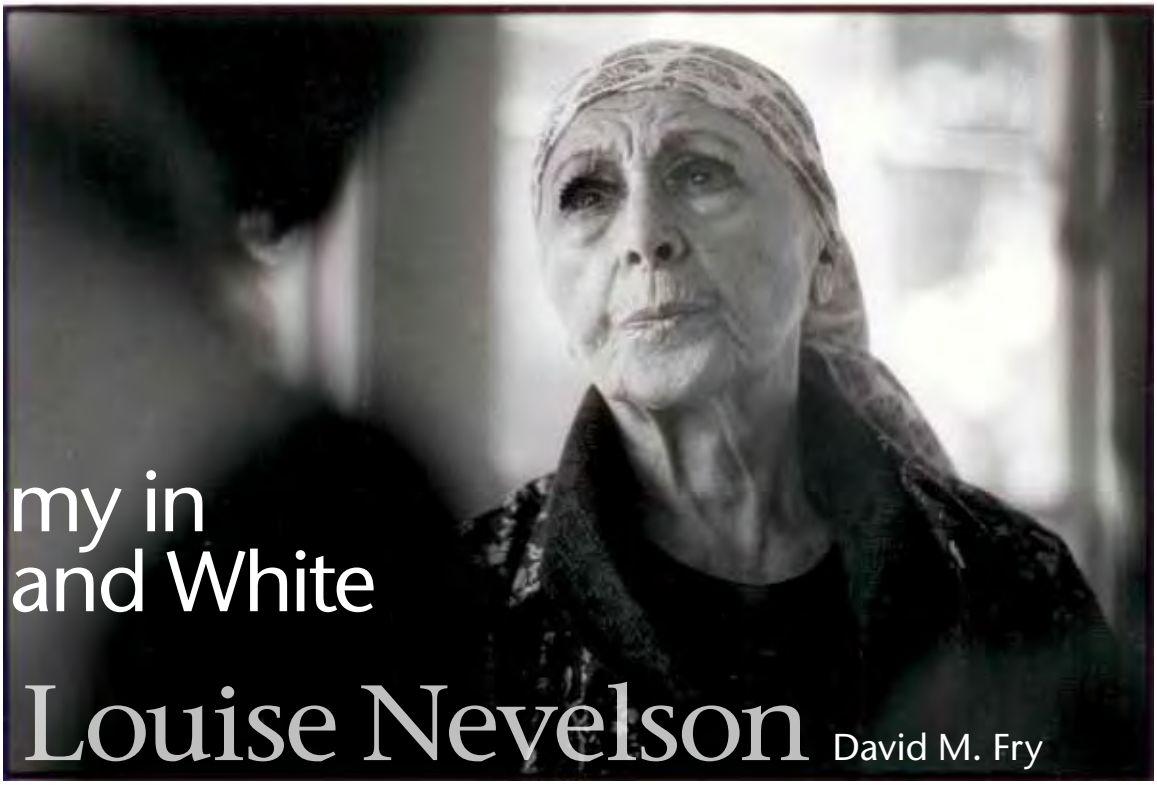
Photo: Richard Raffan

Scoops, 1970-1974,
Teak, yew, imbuia,
(largest)
3" (76 mm) dia

Alchemy in Black and White

Louise Nevelson

David M. Fry



Louise Nevelson circa 1982

Photo: Westbrook College History Collection, University of New England, Portland, Maine

The modern sculpture collections of the world's major art museums display a wealth of materials and forms, but turned wood rarely shines among them. A notable exception stands proud in the work of Louise Nevelson (1899–1988). One of the widely exhibited titans of twentieth-century sculpture, she frequently incorporated turnings in her pieces, almost as signature elements. Yet for all her influence on contemporary culture, her impact on studio woodturning has proven elusive, even though her productive final decades overlapped the rise of artistic turning in the 1970s and 1980s.

Undoubtedly, Nevelson's art remains unknown or alien to many woodworkers because of its radical departure from the craft tradition. In her most characteristic works, she did not create with raw material, but instead assembled found objects. These included a diverse mix of fabricated discards such as balusters, finials, moldings, hand tools (especially hammers), and even toilet seats, along with plentiful rough shards, disks, and kindling. Rather than exploit the grain and color of the wood, she obscured them with a monochromatic overlay of pigment to unify the parts. Joinery tended to be crude, with nails and stamped brackets holding things together under the paint. Surfaces ranged from relatively smooth to coarse, with dings, milling marks, and other blemishes readily apparent to close inspection.

"I think art is tough and naturally an artist is sensitive and tough all at once. It's like a beautiful instrument that has the fortissimo and the pianissimo. You can't be shouting all the time; you can't be whispering all the time."

Despite the license that Nevelson took with materials and technique, many art lovers and critics believe that she transformed what might have been a chaotic jumble of castoffs in lesser hands into assemblages with surprising coherence and presence. To their eyes, she did not lack discipline or craft; instead, she redefined what these concepts meant in the service of what she called *alchemy*—the transformation of the ordinary into the extraordinary. For those willing to overcome any initial bewilderment, an open view of her work can offer insight into not only the teeming chambers of a restless sculptor's mind but also a toolchest for any artist seeking to unleash the imagination.

The cube

Although many aesthetic traditions influenced Nevelson, Cubism formed the backbone of her work. As she was coming of age, Cubists like Picasso and Braque were busy fracturing the traditions of the visual arts in tandem with widespread upheaval in the performing and literary arts. Meanwhile, relativity and indeterminacy were overturning scientific concepts of space–time, and

Louise Nevelson, *Black Wall,* 1964, Painted wood, metal, 65" × 39½" × 10¼" (165 cm × 100 cm × 26 cm)

Hirshhorn Museum and Sculpture Garden, Smithsonian Institution
Gift of Joseph H. Hirshhorn, 1966

Photo: Lee Stalsworth

WWI was crushing Europe under the treads of new mechanized warfare.

Although early Cubism mimicked these larger cultural forces by breaking down its subjects into multiple disorienting planes, a synthesizing approach soon appeared that consolidated different elements in the same work. During the 1940s, after a decade of creating simple Cubist art in ink, oils, terra cotta, and bronze, Nevelson gravitated to the assemblage techniques introduced by Picasso and Duchamp and, like them, began to incorporate ready-made items into the work. The rekindling of global war had left artists in short supply of metals, while scrap wood parts remained plentiful for recycling. Her father had been a lumber merchant, and she felt a natural affinity with the material she scavenged from streets and furniture factories for both stove and studio during her lean years.

It was not until her fifth decade that Nevelson perfected her trademark style of stacked cubes and freestanding totems arrayed in rejuvenated throwaways. As her work progressed, she moved from tabletop displays to bookcase dimensions to installations. Later she would call herself the "grandmother of environment" as installations came into fashion. Along with box maker Joseph Cornell and "combine" artist Robert Rauschenberg, she had introduced another level of complexity and choreography into fine art.

Color, layers, and strange bedfellows

Black Wall (1964) serves as an excellent sampler of Nevelson's techniques and materials in a midsize, human-scale work. Perhaps 150 objects fill a dozen attached milk crates, complete with handholds. At least sixteen turned balusters appear here and there, along with numerous disks and a few wedges, corner moldings, spheroids, and blocks. Strips and rough scrap fill many voids. A cabriole leg protrudes inconspicuously along the lower left side, while a slender upholstery hammer conceals its identity face-on near the assemblage center.

Clearly, Nevelson wanted none of these details to compete with the work's overall impact on her audience. What better way to finesse piecemeal viewing than by covering everything in a single color, and what better choice for the job than black? For certain occasions, she would overlay with white or even gold, but black usually served best because she felt it neutralized the past lives of the components. More important, it created a new collective identity, as when a few well-placed smudges on paper resolve into an unlikely face half in shadow.

"I don't want to make sculpture and I don't want to make paintings; I'm not looking to make anything. I myself need, for my place of consciousness, a form. It's almost like you are an architect that's building through shadow and light and dark. You are really an architect in that place, but you don't want to make buildings for people; you are—in another dimension—the architect, you see. But it's a very real world."

Indeed, object placement and shadows play critical roles in Nevelson's quest to conjure a fourth, transcendent dimension. She believed monochromatic surfaces engaged the viewer with the interaction of shadow and light among the cubes. Layering with partial concealment of elements added to the effect.

To color negation and shadow play, Nevelson added a technique borrowed from Surrealism—uncanny juxtapositions. It is easy to imagine the artist, with her enduring preoccupation with architecture, dance, and theater, assuming the duties of playwright, set designer, and casting director for staging scenes, creating tension among her incongruous characters yet maintaining a larger balance. As the most fully formed objects on display, balusters occupy the leading roles in *Black Wall,* sometimes as heroic coiled columns lacking subtlety, and other times as elegant, shapely figures. Clusters of disks form choruses of sorts, displaying the interiors of the principals in cross-section. In contrast, rough wedges posture with flat ▸

Louise Nevelson, *Case With Five Balusters,* 1959, Wood, paint, 63⅜" × 27⅝" × 9½" (161 cm × 70 cm × 24 cm)

Collection Walker Art Center, Minneapolis; Gift of Mr. and Mrs. Peter M. Butler, 1983

Photo: Courtesy Walker Art Center

faces and hard edges, while detritus piles up in the background behind ornate moldings. In the end, what matters is the drama, not the actors.

Although Nevelson sought to transform the familiar, she did not completely purge her materials of existing cultural meaning. Indeed, she admitted that black could be "aristocratic" as well as neutral, and her baroque spindles recalled the furnishings of the upper classes. Color and cultural references figured even more conspicuously in *Case with Five Balusters,* a white tableau within her breakthrough 1959 installation, *Dawn's Wedding Feast,* which filled four "chapels" within the Museum of Modern Art. With their celebratory white presentation, the intricately carved balusters earned a place of distinction between layers of Cubist confetti. As in so many of her works, the assembled host also evoked the mystery and inevitable loss haunting architectural ruins.

Sculpture as autobiography

Ultimately, the relationships depicted in Nevelson's work explored personal as well as cultural identity. As a young woman, she had abandoned the financial security of an unhappy marriage to pursue her multiple interests in the arts. In the decades that followed, she struggled to support herself, battled depression, anguished over a son at sea during war, and faced criticism of her art and gender. With the arrival of lasting success in the late 1950s and the emergence of her theatrical public persona, she still continued to mine those turbulent years for form and content.

Epilogue for woodturning artists

Even for skeptical woodturners, Nevelson offers a clutch of provocative ideas and vehicles for experimentation. She has demonstrated how the spindle, in addition to the more familiar vessel, can perform an expressive role in art. Meanwhile, her assemblages have testified to the drama of interacting, strategically placed objects sequestered in a small box, wall grid, or sprawling installation. A few lathe artists, such as Stephen Mark Paulsen and Darrell Copeland, have already ventured into this realm, but many avenues remain unexplored, particularly at the installation level. Admittedly, it is hard to imagine spending more than a decade on a single project or assembling thousands of pieces to fill several rooms. Pursuing that level of complexity requires enormous vision, self-confidence, and stamina. The immensity of the challenge casts Nevelson's lifetime accomplishments into bold relief. ■

> *"I might go to bed and all these forms would take on a life of their own and they moved as if you plugged in the electricity."*

David M. Fry turns wood and writes near Washington, D.C.

Highlights of the artist's life

1899–1920: Spent early years in Ukraine and Maine

1920s: Studied at Art Students League in New York, studied theater

1930s: Worked with muralist Diego Rivera and Cubist Hans Hofmann, studied modern dance, "discovered" Mayan art and architecture

1940s: Experimented with different media, exhibited at Nierendorf and the Whitney, began assemblage constructions

1950s: Participated in four one-woman shows at Grand Central Moderns and in landmark exhibition *Sixteen Americans* at the Museum of Modern Art; became art scene celebrity

1960s: Represented the nation at the Venice Biennale (holy grail of the art world), had first major retrospective at the Whitney, began series of large public works in steel and other materials, created *Homage to Six Million*

1970s: Worked with foundry, city officials to fabricate and install her *Night Presence IV* on Park Avenue and *Shadows and Flags* at Louise Nevelson Plaza, completed her funereal black masterwork *Mrs. N's Palace* (1964–1977), designed chapel at St. Peter's Lutheran Church

1980s: Continued working until her death in 1989, leaving estate of at least $12 million

2000: Featured on postal stamp

2008: Resurrected in Edward Albee's play *Occupant*

Today: Represented in more than ninety public collections worldwide

Members' Gallery

Malcolm Tibbetts

Most of the animals whose tracks are profiled on the vessel live in close proximity to my home. Once in a while, raccoons wander into my bedroom; bears roam through my backyard. Other than an occasional spilled trash can, they have been good neighbors.

I created the surface texture by removing wood with a spinning wire wheel, followed by assorted sanding mops.

Malcolm will host the Segmented Turners' activities Friday night at the San José symposium. More of his work can be seen at tahoeturner.com.

Sierra Neighbors, 2012, Redwood, Douglas fir, carob, walnut, dye, 21" × 14" (53 cm × 36 cm)

Keith Burns

Collaboration

Many ideas grow better when transplanted into another mind than the one where they sprang up.
—Oliver Wendell Holmes

No matter what accomplishments you make, somebody helped you.
—Althea Gibson

Keith Burns, Cynthia Gibson, *Anticipation,* 2012, Cherry, 6½" × 4" (17 cm × 10 cm)
Photo: Michael Gibson

I first saw Cynthia and Michael Gibson's work on an Internet forum when Mike started posting images of his teapots, some of which Cynthia embellished with pyrography. I had not been a big fan of teapots, but these fabulous creations set a new standard and changed my viewpoint. Mike and Cynthia are married *and* they create beautiful art together. It is obvious that their work comes from one heart.

We became friends after meeting on an online forum where Cynthia offered to help me with my exploration into pyrography. The three of us continued to build our friendship through email and phone discussions on pyrography, turning, and life in general. I live in Tennessee and the Gibsons live in Georgia. We finally met face-to-face at the Saint Paul symposium and it was like seeing old friends. During our first conversation, I mentioned the possibility of doing a friendship collaboration with Cynthia. Mike thought it was a great idea and encouraged us. Six months later, I completed a hollow form, with lid and finial, and sent it to Cynthia. She immediately went to work performing her pyrographic magic. I was honored.

The name *Anticipation* came from Cynthia: I frequently asked how she was doing and for a sneak peek; she advised patience and suggested that the first look should be in person. In late January when I opened the box, I was thrilled. Cynthia took my simple hollow form and transformed it into a work of art!

A collaboration like ours goes beyond the skills involved. It developed from a mutual respect and admiration of each other's work and from friendship. This friendship shows in our collaboration. We will treasure the experience and the outcome always.

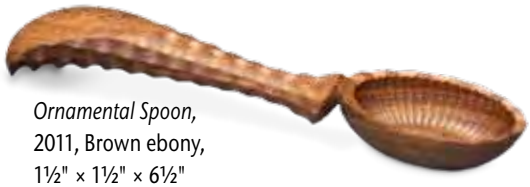
Linda Ferber

Wandering in Willowwack, 2012, Oak, maple, cherry, walnut, birch, 4" × 4" (10 cm × 10 cm) dia
Photos: Tib Shaw

Joshua Salesin

With each issue of *AW* I'm motivated to try new techniques, somehow finding a way to make them my own. Barbara Dill's informative and fascinating article on multiaxis turning (*AW*, vol 26 no 6) inspired me to make these *Ornamental Spoons*. The article saved countless hours of trial and error learning the basics of multiaxis turning and allowed me to focus on solving a puzzle: how to lathe-turn an ornamental spoon from a single, solid piece of wood. Through fourteen prototypes, I arrived at the design pictured here.

Wooden spoons have a long and interesting history, telling the cultural story of the people who carved them. For me, when ornamental turning raises a utilitarian object into the realm of decorative arts, I find it to be particularly magical. So, in undertaking my spoon challenge, I sought to bridge the line between functional and fantastical, organic and technical.



Ornamental Spoon, 2011, Brown ebony, 1½" × 1½" × 6½" (38 mm × 38 mm × 165 mm)

Ornamental Spoon, 2011, Cocobolo, 1½" × 1½" × 6½"

Collection of Joe Seltzer

Top-down view of brown ebony *Ornamental Spoon* after cutting on four centers. I further refine the shape of the handle on a Holtzapffel lathe, positioning to match the various centers, followed by rose-engine turning the inside of the spoon on the fifth and final (elliptical) center.

Joshua Salesin Ornamental Turning

The precision cut of my work often causes people to conclude it must be made using a computer program and computer-controlled machines, but nothing could be further from the truth. Turning with an antique ornamental lathe using eye-hand coordination and on-the-fly intuition was the very thing that enticed me down this road and away from long hours at a computer-based occupation.

The *Bumpy Ellipse Box* combines the capabilities of the rose engine lathe (for the inside and top patterns) with a Holtzapffel ornamental lathe (for the outside and bottom of the box).

A well-equipped Holtzapffel outfit includes various chucks (elliptical, eccentric, rectilinear, spherical), cutting frames (horizontal, vertical, universal, eccentric, epicycloidal), apparatus for curvilinear, spiral, and reciprocating work, and a collection of profile drills and formed cutting tools. An index plate and compound-slide tool holder allow for precision results, all by hand. When combined, an endless variety of shapes and designs is possible. And if that isn't inspiring in and of itself, I don't know what is! It has taken me years to learn how to successfully utilize each of the apparatuses, especially in combination with each other.

To form the bumpy side pattern, I used an elliptical chuck combined with a special mechanism to equally divide the ellipse, set in combination with a geared spiral apparatus and reciprocating attachment, along with a phase adjustment applied to each cut. At the same time, I gave the side profile of the box a rounded mid-section using a spinning cutter following along a curvilinear template.

The bumpy side pattern inspired the spiky design on the top of the box. Using a rose engine lathe, the headstock contains a series of patterned discs (called *rosettes*) that rock back and forth on a pivot as I slowly rotate the work by hand. Pumping action along the axis of the lathe bed allows even more variations. A frequency apparatus alters rosette count, plus amplitude and phase of the rosette is also adjustable. It is the combination of these capabilities that allows such a design, and makes working with a rose engine lathe unique and engaging.

More of Joshua's work can be seen at joshuasalesin.com. ■

Bumpy Ellipse Box, African blackwood, 2" × 2" × 4" (51 mm × 51 mm × 102 mm)

Turned from a solid piece of African blackwood using a 175-year-old ornamental lathe, the *Bumpy Elliptical Box* explores tactile surface ornamentation on the backdrop of a beautiful shape. The design is the culmination of several years of refinement combining ornamental-lathe and rose-engine lathe-turning techniques.

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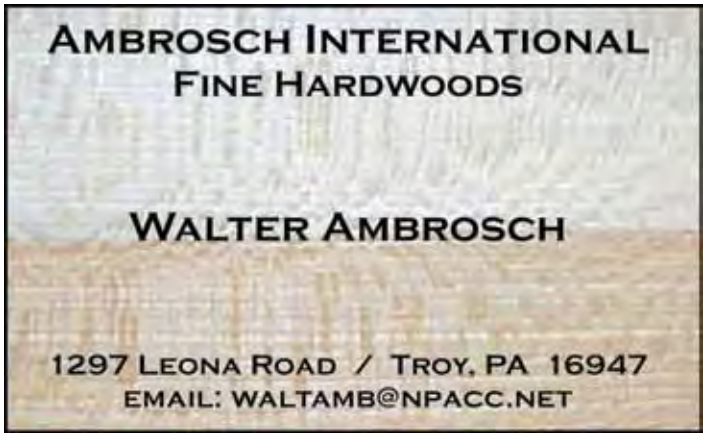

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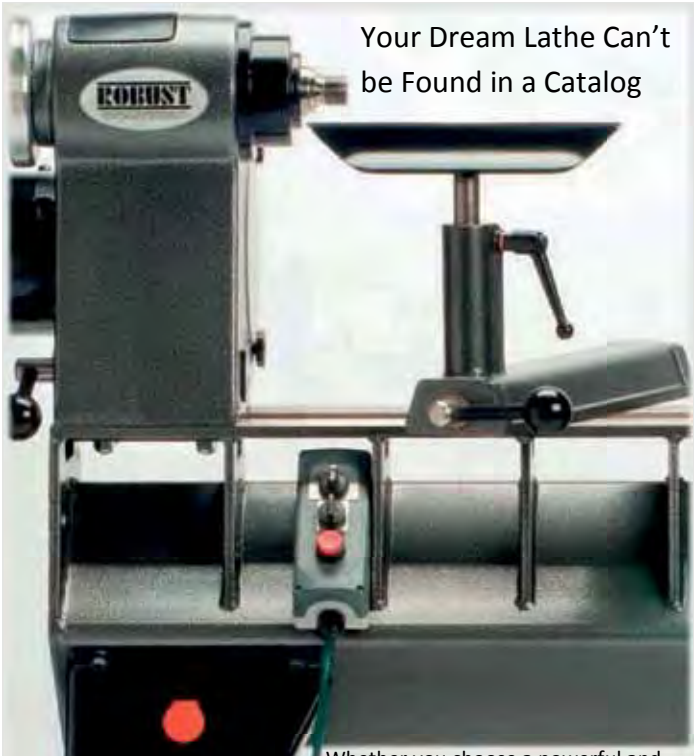

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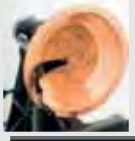

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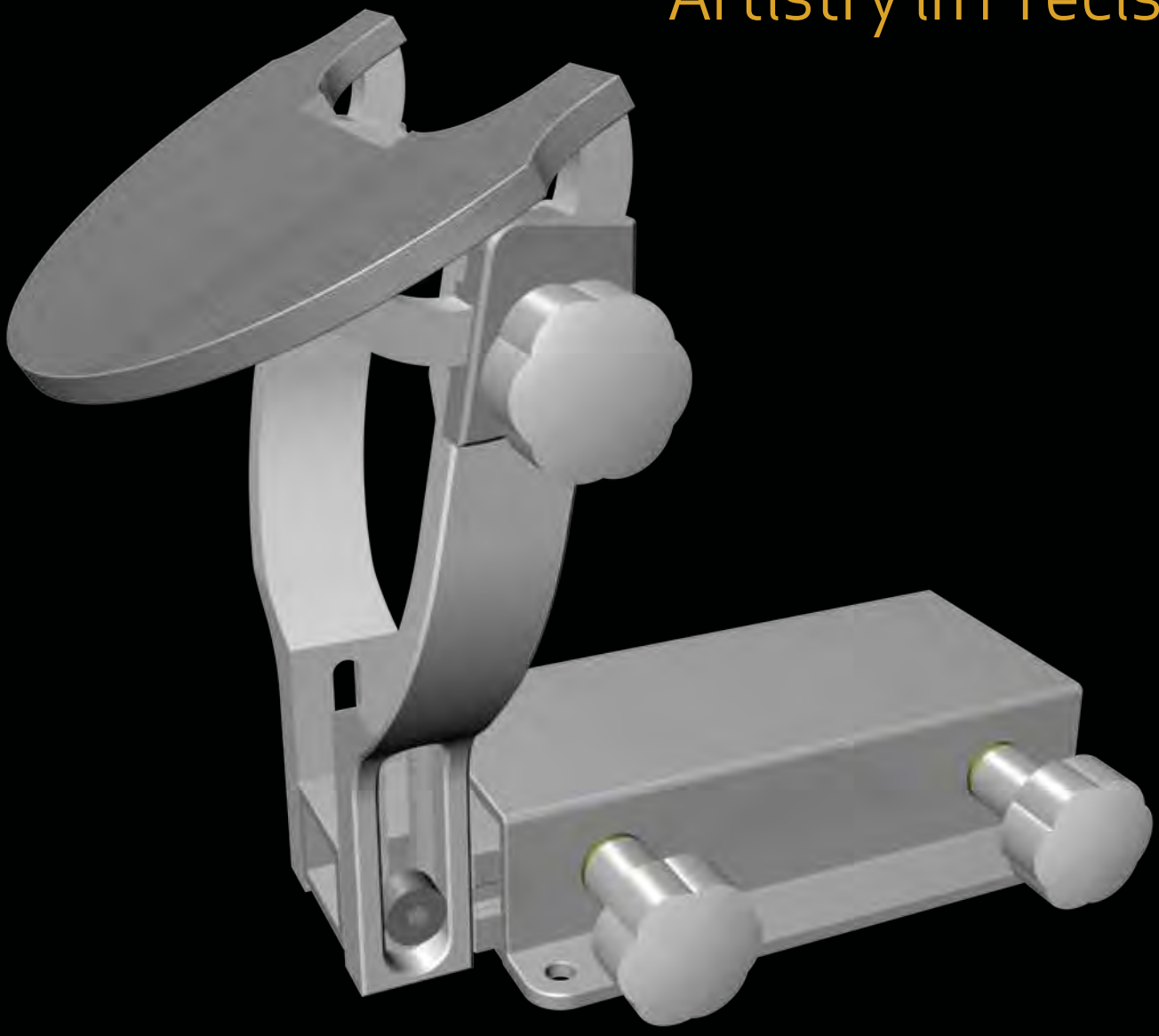

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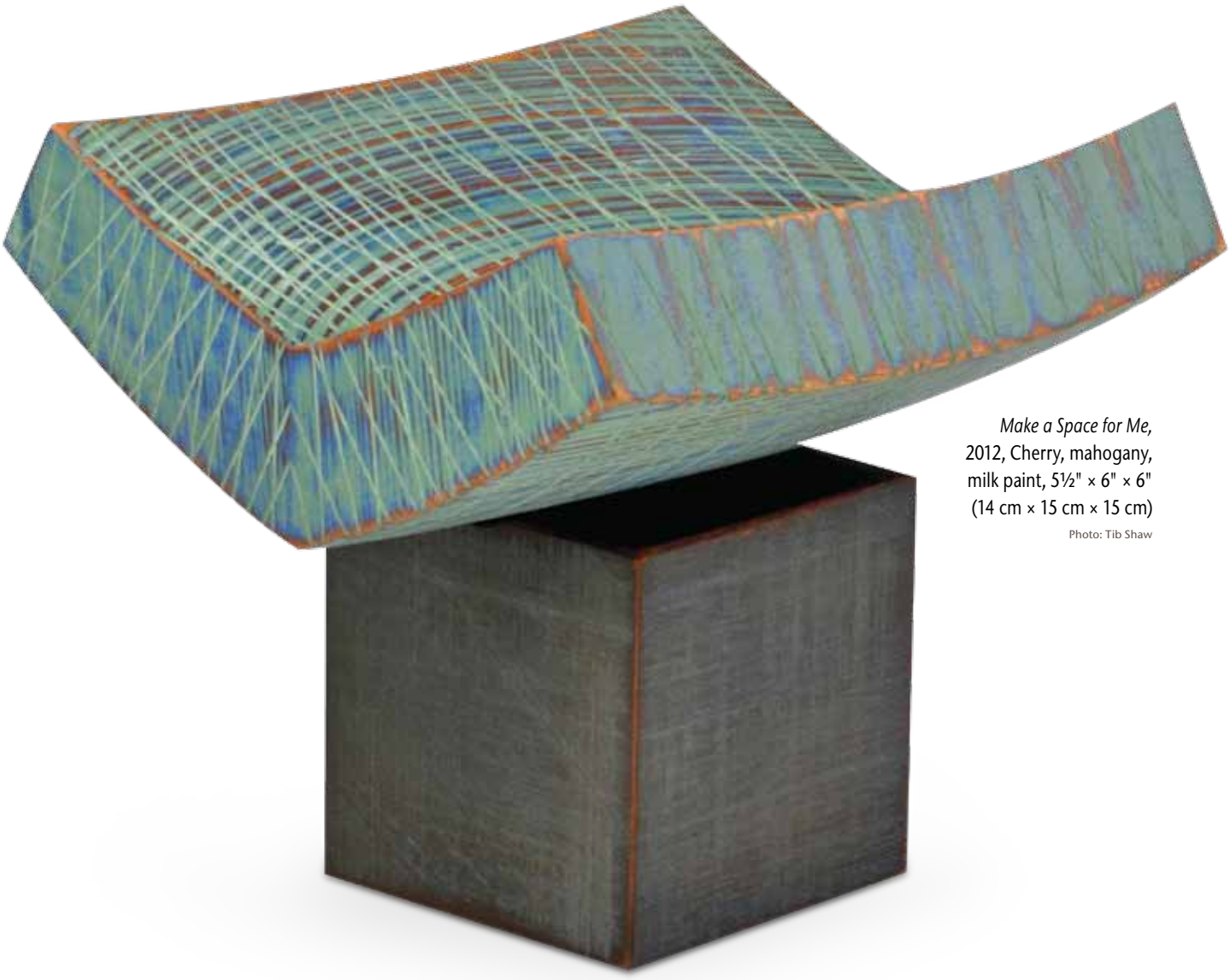

Make a Space for Me, 2012, Cherry, mahogany, milk paint, 5½" × 6" × 6" (14 cm × 15 cm × 15 cm)
Photo: Tib Shaw

Mark Gardner

When my daughter was two and recently moved from our bedroom to her own, she would get up in the early morning and come to our bed and climb in between my wife and me and say, "Make a space for me. Make me a bird nest." This meant she wanted Nancy to make a circle with her arms for her to curl up in.

This got me thinking about birds building nests and us working on our home, making a space to live in. I made *Make a Space for Me* for the "Beyond Containment" exhibit in an attempt to incorporate some of these ideas into a sculpture. The form itself represents a cradle and the tool marks and carved lines reference a nest.

—Mark Gardner

More of Mark's work can be seen at markgardnerstudio.com. *Make a Space for Me* is part of the Professional Outreach Program's "Beyond Containment" exhibit at the 2012 San José international symposium. A catalog of this and past POP exhibits can be ordered at woodturner.org and viewed at galleryofwoodart.com.